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ABSTRACT

A 3-year study on Japanese language instruction is reported. The project included the following: investigation of the feasibility of teaching high school and college second language students learning strategies for developing language proficiency; development of related instructional materials; and description of the impact of instruction on students. The report gives an overview of the study itself, its purposes and organization, methodology, and results. The section on results addresses a number of issues, including selection of learning strategies; implementation of learning strategies instruction; students' use and perception of language learning strategies, for each year of the study; influence of language learning strategies on the students; and a general discussion of results. A concluding chapter summarizes the study and reports major accomplishments, dissemination activities, emerging issues, and future research directions. Substantial appended materials include a variety of questionnaires, pre- and posttests, a teacher interview guide and ranking scale, and sample learning strategies lessons. (MSE)

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LEARNING STRATEGIES IN JAPANESE
FOREIGN LANGUAGE INSTRUCTION

FINAL REPORT

September 1993

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**LEARNING STRATEGIES IN JAPANESE
FOREIGN LANGUAGE INSTRUCTION**

FINAL REPORT

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September 1993

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Chapter I: Introduction

Georgetown University has completed a three-year study, **Learning Strategies in Japanese Foreign Language Instruction**, which investigated the feasibility of teaching students learning strategies designed to assist them in developing proficiency in the Japanese language. The study was funded by the United States Department of Education through the Office of International Studies and Research. This Final Report describes the activities, accomplishments, and findings of the study from its initiation in September 1990 to its completion on August 31, 1993.

Purposes of the Study and Theoretical Background

The major purposes of the study were to investigate learning strategies instruction appropriate for beginning level high school and college students of Japanese, to develop instructional materials to teach the strategies, and to describe the impact of the instruction on students. In addressing these major purposes, additional objectives included issues in professional development of teachers, design of materials, student affect and motivation, and teacher attitudes and teaching styles.

This study has built on an emerging interest in a cognitive perspective in second and foreign language acquisition research. While cognitive learning theory has become a well-established model for instruction in general education, the theory's contributions to the area of second language acquisition are relatively recent.

A theoretical model in second language acquisition is important as a basis for explaining how a language is learned and how second and foreign languages can best be taught. Moreover, for purposes of research on language learning processes, a theoretical model should describe the

role of strategic processes in learning. A cognitive theoretical model of learning (e.g., Anderson, 1983; 1985; Gagné, 1985; Gagné, Yekovich, & Yekovich, 1993; Shuell, 1986) accomplishes these objectives because the theory is general enough to explain how learning takes place in a variety of simple and complex tasks, and because cognitive theory provides important insights into second language acquisition (McLaughlin, 1987; O'Malley & Chamot, 1990).

In cognitive theory, learning is seen as an active, constructive process in which learners select and organize informational input, relate it to prior knowledge, retain what is considered important, use the information appropriately, and reflect on the outcomes of their learning efforts (Gagné, 1985; Gagné, et al., 1993; Shuell, 1986). In this dynamic view of learning, second language acquisition should be most successful when learners are actively involved in directing their own learning in both classroom and non-classroom settings. Second language learners would select from target language input, analyze language functions and forms perceived as important, think about their own learning efforts, anticipate the kinds of language demands they may encounter, and activate prior knowledge and skills to apply to new language learning tasks. It is because of this intricate set of mental processes that second language acquisition has been construed as a complex cognitive skill (McLaughlin, 1987; O'Malley & Chamot, 1990).

Literature Review

The intent of learner or **learning strategy** use is to facilitate learning (Weinstein & Mayer, 1986), in contrast to **communication strategies** employed to negotiate meaning in a conversational exchange (Tarone, 1980). However, many communication strategies may serve as effective learning strategies when they are used to achieve a learning goal. Cook (1991) points out that individuals use a number of these communication strategies (such as substituting

an approximate word or describing the function of a word that is unknown or not immediately available) in native language communication, and that only communication strategies that reflect knowledge of another language are unique to second language interaction.

The research on strategic processes in second language acquisition has had two main approaches. Much of the original second language strategies research focused on identifying the characteristics of good language learners, and this strand of research on uninstructed learner strategies has since expanded to include descriptions of strategy use of less effective language learners. A second approach has been concerned with learning strategies instruction, in which foreign and second language students have been taught how to use learning strategies for a variety of language tasks. Learner and learning strategies may entail conceptual or affective processes (O'Malley & Chamot, 1990), or a combination, and may also involve social interaction.

Early Research on the Good Language Learner

The first descriptions of the characteristics of good language learners appeared in the mid-1970s. Rubin (1975) suggested that the good language learner could be identified through special strategies used by more effective students. Stern (1975) identified a number of learner characteristics and strategic techniques associated with good language learners. These studies were followed by empirical work by Naiman, Fröhlich, Stern, & Todesco (1978) which pursued further the idea that learning strategies are an important component of second language learning ability. Hosenfeld (1976) investigated learner strategies through verbal reports or think-aloud protocols, and in a subsequent study taught high school students of French explicit reading strategies (Hosenfeld, Arnold, Kirchofer, Laciura, & Wilson, 1981). Cohen and Apehek (1981)

collected anecdotal reports from students on the associations they made while learning vocabulary, and found that students who made associations remembered vocabulary words more effectively than students who did not make associations.

Classification of Learner Strategies

Rubin (1981) conducted interviews with second language students and suggested a classification scheme consisting of strategies that directly affect learning (e.g., monitoring, memorizing, deductive reasoning, and practice) and processes that contribute indirectly to learning (creating opportunities for practice and production tricks). More recently, others have analyzed the types of strategies used with different second language tasks based on interviews, observations, and questionnaires. Wenden (1987) focused on describing students' metacognitive knowledge and strategies that assist them in regulating their own learning. Oxford (1986) developed the Strategy Inventory for Language Learning (SILL), which incorporates more than 60 strategies culled from the literature on second language learning. The SILL is a 121-item Likert-type instrument which lists learning strategies identified in the literature, including cognitive strategies, compensation strategies, metacognitive strategies, social strategies, and affective strategies. In a typical recent study, the SILL was administered to 1200 university students studying various foreign languages (Nyikos & Oxford, 1993). A factor analysis revealed that language students may not use the strategies that research indicates would be most effective - such as strategies that promote self-regulated learning and strategies that provide meaningful practice in communication. This information is of great utility in designing intervention studies to teach effective strategy use.

In research conducted by O'Malley and Chamot and their colleagues, a broad range of classroom and non-classroom tasks were analyzed in interviews on learning strategies with second language students (O'Malley & Chamot, 1990). The tasks represented typical second language classroom activities such as vocabulary and grammar exercises, following directions, listening for information, reading for comprehension, writing, and presenting oral reports, and also included language used in functional contexts outside the classroom such as interacting at a party and applying for a job (O'Malley, Chamot, Stewner-Manzanares, Küpper, & Russo, 1985a). Tasks used for think-aloud interviews included listening to and reading dialogues and stories as well as science and social studies academic content materials (Chamot & Küpper, 1989; O'Malley, Chamot, & Küpper, 1989). Participants in these interviews included students enrolled in English as a second language and foreign language classrooms at high school and university levels.

The classification system that seemed best to capture the nature of learner strategies reported by students in these studies was based on the distinction in cognitive psychology between metacognitive and cognitive strategies together with a third category for social/affective strategies (Chamot & Küpper, 1989; O'Malley, Chamot, Stewner-Manzanares, Küpper, & Russo, 1985a; O'Malley, Chamot, & Küpper, 1989). This tripartite classification scheme, developed initially with ESL students (O'Malley et al., 1985a), was later validated with foreign language learners, including students of Russian, Spanish, and Japanese in the United States (Barnhardt, 1992; Chamot and Küpper, 1989; Omori, 1992), English as a foreign language students in Brazil (Absy, 1992; Lott-Lage, 1993), and students of French in Canada (Vandergrift, 1992). Examples of strategies in each of these categories are: metacognitive strategies for planning,

monitoring, and evaluating a learning task; cognitive strategies for elaboration, grouping, inferencing, and summarizing the information to be understood and learned; and social/affective strategies for questioning, cooperating, and self-talk to assist in the learning process. Table 1 provides examples of strategies in each of these categories.

Additional individual strategies have been suggested (e.g., Cohen, 1990; Oxford, 1992; Rost & Ross, 1991), in particular communication strategies used in social contexts. Interactive strategies for expressing apologies (Cohen, 1990), types of clarification questions used at different levels of proficiency (Rost & Ross, 1991), and other conversational strategies (Chamot, Küpper, Thompson, Barrueta, & Toth, 1990; Oxford, 1990) can in general be classified in the category of social/affective strategies.

Strategic Differences between Effective and Less Effective Language Learners

Most descriptive studies of language learning strategies have focused on the strategies of good language learners, whereas only a few studies have investigated the strategies of less effective language learners. Unsuccessful language learners are not necessarily unaware of strategies, but are less able to determine the appropriateness of a strategy for a specific task and may have a narrower range of strategies. More effective students appear to use a greater variety of strategies and use them more appropriately than less effective students.

A study of successful and unsuccessful ESL students in a university intensive English program revealed that unsuccessful learners did use strategies, but used them differently from their more successful classmates (Abraham & Vann, 1987; Vann & Abraham, 1990). Although some of the unsuccessful language learners in the study used about as many strategies of the same type as the more successful learners, good language learners were more adept at matching

strategies to task demands. A further analysis of the task demands revealed that tasks were approached differently depending on learner characteristics, such as level of risk-taking, concern with accuracy, or concern with meaning. The conclusion reached was that unsuccessful language learners are not inactive, as had often been previously assumed, but seem to lack the metacognitive knowledge about the task that would allow them to select more appropriate strategies.

Another ESL study that investigated differences between effective and less effective language learners focused on listening comprehension (O'Malley, Chamot, & Küpper, 1989). Think-aloud interviews were conducted with high school students as they were listening to brief academic presentations in English. Statistical analysis of the strategies used for the listening tasks revealed significant differences in strategy use between effective and less effective listeners in three major areas. Effective listeners used comprehension monitoring, association of new information to prior knowledge, and making inferences about unknown words or information significantly more often than less effective listeners. A qualitative analysis of the think-aloud interviews revealed differences between effective and less effective students in their approaches to different stages of the listening task. At the initial stage, less effective listeners were not able to focus their attention on the input as well as effective listeners. Later, less effective students parsed meaning on a word by word basis, and did not attempt to infer meanings of unfamiliar items. Finally, the less effective listeners did not use elaboration, or association of new information to prior knowledge, as a way to assist comprehension or recall of the listening passage. The failure of less effective listeners to use appropriate strategies for different phases

of listening appeared to be related to a lack of metacognitive understanding of the task demands and of appropriate strategies to use.

In similar research with high school foreign language students, group interviews and individual think-aloud interviews were conducted for a variety of foreign language tasks, including listening, reading, grammar cloze, role-playing, and writing. (Chamot, O'Malley, Küpper, & Impink-Hernandez, 1987; Chamot, Küpper, & Impink-Hernandez, 1988a; b) Differences between more and less effective learners were found in the number and range of strategies used, in how the strategies were used, and in whether they were appropriate for the task and individual students' understanding of the task. This study found that the type of task was a major determinant of what strategy or strategies were used most effectively for different types of students. For example, some strategies used by beginning level effective language learners were used less often by the same learners when they reached intermediate level classes, where they developed new strategies to meet the requirements of new tasks. In contrast to less effective foreign language students, effective students applied metacognitive knowledge and strategies to language tasks by planning their approach to the task and monitoring their comprehension and production for overall meaningfulness, rather than for word by word translation. They also appeared to be aware of the value of their prior linguistic and general knowledge and used this knowledge to assist them in completing the tasks.

Conclusions about strategic differences between more and less successful language learners suggest that explicit metacognitive knowledge about task characteristics and appropriate strategies for task solution is a major determinant of language learning effectiveness. In their unawareness of task demands and lack of metacognitive knowledge about selecting strategies, less

effective language learners seem to fall back on a largely implicit approach to learning in which they use habitual or preferred strategies without analyzing the requirements of the particular task.

Learning Strategies and Motivation

Motivation plays an important role in all types of learning, including language learning. Highly motivated students work hard, persevere in the face of difficulties, and find satisfaction in the successful accomplishment of a learning task. Strategies have been linked to motivation and particularly to a sense of self-efficacy leading to expectations of successful learning (Zimmerman & Pons, 1986). The development of an individual's self-efficacy, or level of confidence in successfully completing a task is closely associated with effective use of learning strategies (Zimmerman, 1990). Self-efficacy is at the root of self-esteem, motivation, and self-regulation (Bandura, 1992). Self-efficacious learners feel confident about solving a problem because they have developed an approach to problem solving that has worked in the past. They attribute their success mainly to their own efforts and strategies, believe that their own abilities will improve as they learn more, and recognize that errors are a part of learning. Students with low self-efficacy, on the other hand, believe themselves to have inherent low ability, choose less demanding tasks on which they will make few errors, and do not try hard because they believe that any effort will reveal their own lack of ability (Bandura, 1992).

Having access to appropriate strategies should lead students to higher expectations of learning success, a crucial component of motivation. An important aspect in viewing oneself as a successful learner is self-control over strategy use. This type of self-control can be enhanced if strategy instruction is combined with metacognitive awareness of the relationship between strategy use and learning outcomes. Students with greater metacognitive awareness understand

the similarity between a new learning task and previous tasks, know the strategies required for successful problem solving or learning, and anticipate that employing these strategies will lead to success (Paris & Winograd, 1990).

Can Strategies Be Taught?

This section reviews research in both first and second language contexts that provides insights into two questions: (1) If good language learners use strategies differently than less effective language learners, can teachers help less effective language learners improve through instruction in learning strategies? and (2) If so, how should strategies instruction be implemented?

Whereas empirical verification that strategies instruction has a positive effect on second language learning is just beginning to appear, considerable evidence for the positive effects of strategies intervention has already been found in first language learning instructional contexts. Extensive research has verified the influence of strategies with a variety of first language complex tasks and different types of learners. For example, instruction in reading strategies has significantly improved the reading comprehension of poor readers (Gagné, 1985; Gagné et al., 1993; Garner, 1987; Palincsar & Brown, 1984; Palincsar & Klenk, 1992; Pressley, El-Dinary, & Brown, 1992) and instruction in problem solving strategies has had a positive effect on student mathematics achievement (Carpenter, Fennema, Peterson, Chiang, & Loef, 1989; Pressley & Associates, 1990; Silver & Marshall, 1990). Similarly, improvements in writing performance have been reported in a series of studies in which learning disabled students were explicitly taught strategies for planning, composing, and revising their writing (Harris & Graham, 1992). This validation of learning strategies instruction has led to the development of instructional models incorporating learning strategies for content instruction (Bergman, 1992; Harris &

Graham, 1992; Jones & Idol, 1990; Jones, Palincsar, Ogle, & Carr, 1987; Snyder & Pressley, 1990).

Although cognitive instructional research in first language contexts has been concerned with a broad range of complex learning tasks, until recently much second language research on instructed learning strategies has focused mainly on vocabulary (e.g., Atkinson & Raugh, 1975; Ellis & Beaton, forthcoming; Pressley, Levin, Nakamura, Hope, Bisbo, & Towe, 1980), with relatively few studies on strategies instruction for areas such as text comprehension, interactive speaking, or written production.

In strategies research in second language acquisition, two types of studies have provided empirical support for the link between strategies and learning in a second language: correlational studies (Chamot, Dale, O'Malley, & Spanos, 1993; O'Malley, 1992; Padron & Waxman, 1988; Politzer & McGroarty, 1985) and experimental interventions (Brown & Perry, 1991; O'Malley, Chamot, Stewner-Manzanares, Russo, & Küpper, 1985b; Ross & Rost, 1991; Rubin, Quinn, & Enos, 1988). Both types of studies have produced support for the influence of strategies on second language learning tasks.

In a study of ESL high school students, students were randomly assigned to a control group, a group receiving both metacognitive and cognitive strategies instruction, and a group receiving only cognitive strategies instruction (O'Malley et al, 1985b). After two weeks of classroom strategy instruction for about one hour daily, the posttest revealed significant differences favoring the metacognitively-trained group for the transactional speaking task, and significant differences on some of the daily listening comprehension tests.

A similarly designed study was conducted with Arabic-speaking students at a university intensive English program, in which students received different types of strategies instruction for vocabulary learning (Brown & Perry, 1991). On posttest, the group receiving a combination of strategies designed to provide depth of processing through visual, auditory, and semantic associations had a significantly higher rate of recall.

A recent investigation of interactive strategies in discourse between native English speakers and Japanese college students learning English was conducted in two phases, descriptive and instructional (Rost & Ross, 1991). In the descriptive phase, the types of clarification questions asked by Japanese students about a story presented either through a video or live by a native English speaker were identified and categorized by high proficiency or low proficiency listeners. In the instructional phase, randomly assigned groups of students received one of three different training videos on general or specific questioning strategies. The results indicated that strategies used by higher proficiency listeners could be taught successfully to lower proficiency listeners. This study lends support to the teachability and effectiveness in terms of student learning of explicit strategies instruction for oral communication.

An experimental study on the effects of different types of strategy training on listening comprehension for high school Spanish students found some benefits of strategy training, especially when the material was difficult for students (Rubin, Quinn, & Enos, 1988). An important conclusion of the study was that teachers need as much time to understand and become proficient in teaching learning strategies as students do in understanding and applying learning strategies. Further, the study suggested that teachers should be involved in the design of learning strategies lessons.

In a recent study of upper elementary and secondary ESL students, comparisons were made between students whose teachers had had extensive instruction and practice in teaching learning strategies for reading and solving word problems, and students whose teachers had not participated extensively in staff development for strategies instruction (Chamot et al., 1993). Results indicated that the strategies group significantly outperformed the non-strategies group in solving the problem correctly, using the correct sequence of problem solving strategies, and using a greater number of metacognitive strategies.

Summary of Literature Review

This review of research on learning strategies in second language acquisition and related studies in first language contexts indicates that appropriate strategies use is an important factor that differentiates more and less effective language learners, and that useful strategies are both teachable and learnable. The specific conditions which lead to good strategy use are not yet completely understood in second language acquisition, though advances in effective strategies instruction in first language contexts indicates that such instructional procedures have been identified.

Research Questions

Due to increased economic and social ties between the U.S. and Japan, Japanese has become an important language for Americans to learn, and it is taught at increasing numbers of schools throughout the country. Yet, because of the language's unique characteristics, one cannot assume that research on learning strategies for other languages, especially Indo-European languages, can be applied to the teaching of Japanese.

The study of **Learning Strategies in Japanese Foreign Language Instruction** was designed to explore the introduction of learning strategies instruction to beginning level high school and college students of Japanese. Teacher input and student motivation were considered important factors in the ultimate success of learning strategies instruction. The research questions investigated were as follows:

1. Which learning strategies are selected by Japanese instructors as most beneficial to their students?
2. How can learning strategies be taught to high school and college students of Japanese?
3. Do students instructed in learning strategies
 - (a) apply the strategies independently and
 - (b) continue to apply them subsequent levels of language study?
4. Do students who use the learning strategies
 - (a) show greater gains in language proficiency and
 - (b) perceive themselves as more effective learners than students who do not use the strategies?

Modifications

Rating Scales and Teaching Logs

The original proposal included a language proficiency rating scale, based on the ACTFL/ILR/ETS proficiency scales, for instructors to assess students' language proficiency. This rating scale is more appropriate to higher levels of Japanese study. At the beginning level, however, few students have achieved enough to be able to express the type of language functions rated on proficiency scales. Therefore, a Test of Language, relevant to the curricula of the classes participating in the study, was used instead of a proficiency rating scale. The written Test of Language has the following advantages: (1) ease of administration, making it possible to use

with large classes, (2) potential for identical repeated administrations, (3) objective scoring, and (4) inclusion of course content.

Another change from the proposed study was the use of the teaching log form. Teachers were to have kept a log of each strategy lesson presented with their comments about the learning strategies instruction and student reactions. Due to the cumbersome nature of writing daily comments on a separate form, the teachers' sections of the resource guides were expanded to allow for teachers to write comments on each day's presentation of strategies.

Quasi-Experimental Study

During Year 3, quasi-experiments were planned for the high school and college classes. At the high school level, only one teacher of Japanese participated in the study. Although this teacher taught two classes of beginning Japanese, the classes were not comparable due to social, cultural, and economic factors. These differences made it impossible for one class to serve as a control; therefore, the teacher presented the same strategy instruction to both classes.

In contrast, a quasi-experimental study was implemented at the college level. The design was quasi-experimental because the classes and students participating were not randomly assigned to treatment and control groups. Rather, the classes selected for treatment were those taught by research assistants who worked with Language Research Projects.

Resource Guides

The production of the resource guides was influenced by events not foreseen in the original proposal. In Year 1 (1990-1991), the same textbook was being used by the high school and college Level 1 Japanese classes, and a preliminary resource guide was developed for both settings. In Year 2 (1991-1992), however, the high school textbook was changed, resulting in

distinctly different approaches to the introduction of the written form of Japanese as well as in structural sequencing and vocabulary. For this reason, separate resource guides were developed for high school and college classes.

In Year 3 (1992-1993) a teacher from a different high school in another school district participated in the study because the teacher participating in Year 2 resigned from teaching. The Year 3 school district's foreign language classes were proficiency-based and used thematic units, so it was necessary to redesign the high school level resource guide to be consistent with the timing of these units. As a result, the 1993 resource guide may be more useful to teachers at high schools in other locations, as the use of themes is a common approach in high school Japanese programs.

These changes in site and teaching approach required the development of two separate resource guides for high school and college levels in Years 2 and 3. Therefore, four separate resource guides are included with this report (bound separately): (1) Learning Strategies Instruction for High School Japanese 1992 Resource Guide (2) Learning Strategies Instruction for High School Japanese 1993 Resource Guide; (3) Learning Strategies Instruction for College Japanese 1992 Resource Guide; and (4) Learning Strategies Instruction for College Japanese 1993 Resource Guide.

The language learning strategies presented in instruction for this study were drawn from a set of strategies identified in previous studies by O'Malley and Chamot (1986, 1989, 1990). The set of strategies and their definitions evolved over the course of this study. The entire range of strategies identified by the researchers is shown in Table 1.

Table 1

Definitions of Language Learning Strategies

LEARNING STRATEGIES IN THE FOREIGN LANGUAGE CLASSROOM

Learning strategies are thoughts or actions that assist learning.

Metacognitive Knowledge and Strategies: Metacognitive knowledge includes awareness of the task demands, of one's own experiences with similar tasks, and of appropriate strategies for the task. Metacognitive strategies are executive processes used to plan, monitor, and evaluate a learning task.

STRATEGY NAME	STRATEGY DESCRIPTION	STRATEGY DEFINITION
<u>Planning</u>		
Directed Attention	Pay attention	Deciding to attend to and focus on a learning task.
Advance Organization	Preview Skim Gist	Previewing the main ideas and concepts of a text; identifying the organizing principle.
Advance Preparation	Rehearse	Practicing the language that will be needed for a task.
Organizational Planning	Plan What to Do	Planning how to accomplish the learning task.
Selective Attention	Listen or Read Selectively Scan Find Specific Information	Attending to or scanning key words, phrases, linguistic markers, or types of information.
Self-management	Plan When, Where, and How to Study	Seeking or arranging the conditions that help one learn.
<u>Monitoring</u>		
Monitoring Comprehension	Think While Listening Think While Reading	Checking one's comprehension during listening or reading.
Monitoring Production	Think While Speaking Think While Writing	Checking one's oral or written production as it's taking place.
<u>Evaluating</u>		
Self-Assessment	Check Back Keep a Learning Log	Judging how well one has accomplished a learning task.

(Table 1 continued)

Cognitive Strategies: Interacting with the material to be learned by manipulating it mentally or physically.

STRATEGY NAME	STRATEGY DESCRIPTION	STRATEGY DEFINITION
Resourcing	Use Reference Materials	Using reference materials such as dictionaries, encyclopedias, or textbooks.
Grouping	Classify Make Graphic Organizers	Classifying words, terminology, numbers, or concepts according to their attributes.
Note-taking	Take Notes on Idea Maps and T-Lists	Writing down key words and concepts in abbreviated verbal, graphic, or numerical form.
Summarizing	Say or Write the Main Idea	Making a mental, oral, or written summary of information gained from listening or reading.
Deduction/Induction	Use a Rule/Make a Rule	Applying or figuring out rules to understand/produce language or solve a problem.
Imagery	Visualize Make a Picture	Using mental or real pictures to learn new information or to solve a problem.
Auditory Representation	Use Your Mental Tape Recorder Hear It Again	Replaying mentally a word, phrase, or piece of information to learn it or assist in recall.
Elaboration of Prior Knowledge	Use What You Know Use Background Knowledge Make Analogies Contextualize	Relating new to known information, relating different parts, or making personal associations.
Linguistic Transfer	Use Cognates Use Loan Words Use Your Language Knowledge	Using what is already known about language to assist comprehension or production.
Inferencing	Use Context Clues Guess from Context Predict	Using information in the text to guess meanings of new items or predict upcoming information.

Social and Affective Strategies: Interacting with other persons or using affective control to assist learning.

Questioning for Clarification	Ask Questions	Getting additional explanation or verification from a teacher or other expert.
Cooperation	Cooperate Work with Classmates Coach Each Other	Working with peers to complete a task, pool information, solve a problem, or get feedback.
Self-Talk	Think Positively!	Reducing anxiety by improving one's sense of competence.

Framework for Language Learning Strategies Instruction

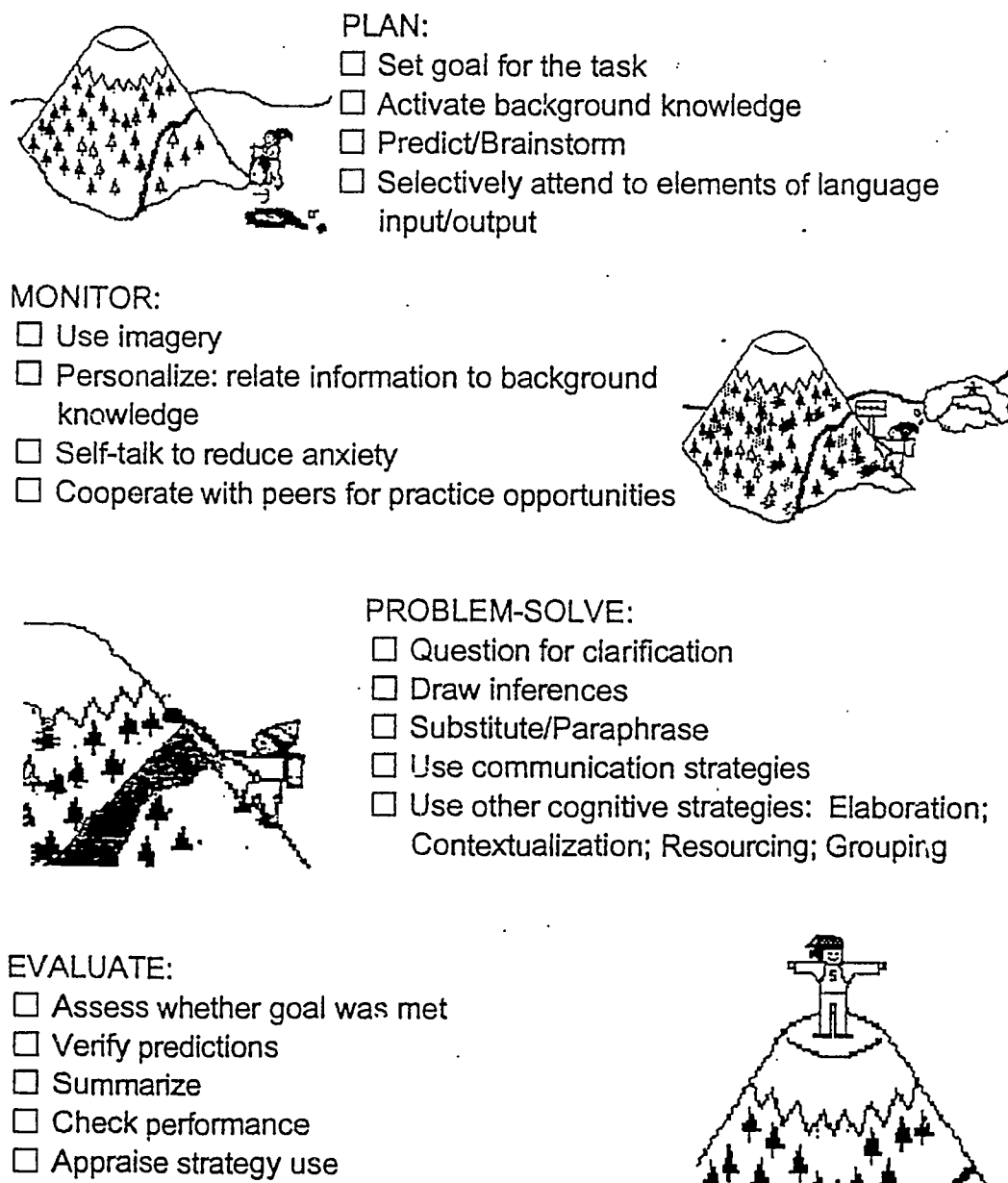
As project staff gained insight into how best to present language learning strategies apparent that an overall framework was needed on which to base the explanation of individual strategies. Specifically, the Year 2 findings on the importance of metacognitive control over strategy use led the researchers to choose a model that would provide a structure to assist students in choosing strategies wisely, depending on the nature of the language learning task and on the individual student's learning style. Presented as a mountain climber analogy (Figure 1), this metacognitive framework is directed at helping students to (1) analyze their tasks, (2) predict the language encountered in the task, (3) monitor their comprehension or production of the language, (4) apply strategies to facilitate the performance of the task, and (5) evaluate their comprehension and the effectiveness of their strategy use.

Overview of the Report

This initial chapter has identified the purposes of the study **Learning Strategies in Japanese Foreign Language Instruction**, described the theoretical background, reviewed the literature on language learning strategies research, and stated the research questions investigated. Chapter II describes the methodology used in conducting the study, with an explanation of how instruments were developed, the subjects chosen, and data collection and analysis performed. Chapter III discusses the results of the study, addressing findings related to each of research question. Chapter IV summarizes the findings of the complete study, discusses implications for practice, and suggests directions for future research in learning strategies research for Japanese instruction. Appendix A contains examples of the instruments used in the study. Appendix B contains sample learning strategies lessons referred to in the report. Appendix C summarizes

student comments on their learning strategies use. The Resource Guides for high school and college levels for 1992 and 1993 are bound separately from this report.

Figure 1. Problem-Solving Process model used as a framework for strategies instruction.



Chapter II: Methodology

Outline of Procedures

Year 1 (September 1990 - August 1991) was designed as a development study, in which instruments to be used for collecting student and instructional data would be created and pilot-tested and a preliminary resource guide revised. This development took place as scheduled, and a set of instruments for measuring the influence of learning strategies instruction was completed. The first instructional study took place in Year 2 (September 1991 - August 1992), in which the instruments and the resource guide were used with two Japanese classes who were given instruction in language learning strategies. The second instructional study was conducted in Year 3 (September 1992 - August 1993) with a quasi-experimental component carried out in the college class that compared a class receiving strategies instruction with a class not receiving the instruction. Each year had its unique characteristics, depending on the teachers and students who participated, and resulted in a reorientation of the instruction and revision of the instruments to obtain a closer integration of strategy instruction with the curricula.

Subjects

Two main groups of students in the Washington, D.C. metropolitan area participated in the project over the three-year period: high school students at four schools and college students enrolled in an intensive Japanese program. Three high school teachers and four college instructors participated in development and implementation of the study. The characteristics of the participating students are summarized in Table 2.

Table 2

Demographic Information on Subjects

School & year of research project	N	N _B *	Avg. school year	Avg. age	M / F	Native Lg.**	For. lgs.
College Year 2 (91-92)	20	16	13.5	18.3	4/12	Eng: 13 Chi, Ital, Viet	13
College Year 3 treatment (92-93)***	15	9	13.4	18.9	3/6	Eng: 7, Chi, Hmg	
H.S. A Year 2 (91-92)	16	15	10.5	16.1	6/9	Eng:7, Chi:3, Viet:2,Ital, Khmr, Kor	12
H.S. B Year 3 (92-93)	27	22	10.2	14.8	8/14	Eng: 9, Kor: 6,Chi: 4, Rus,Thai	17
H.S. C Year 3 (92-93)	33	27	9.9	14.9	18/9	Eng: 13, Kor: 4, Chi: 3, Viet, Japn, Ukr, Tag	22

* N_B = number of students completing Background Questionnaire

** Eng = English; Chi = Chinese; Ital = Italian; Viet = Vietnamese; Khmr = Khmer; Hmg = Hmong; Kor = Korean; Rus = Russian; Japn = Japanese; Ukr = Ukrainian; Tag = Tagalog (One student per language unless otherwise noted.)

*** The Year 3 college control class did not complete the background questionnaire.
N = 18 for the college control class.

Number of students who have studied other foreign languages

During Year 1, 15 students at a private high school in Washington, D.C. were interviewed about their learning strategies. In Year 2, the high school group consisted of 16 students enrolled in a Level 1 Japanese class. In Year 3, two high school classes participated, comprising a total of 60 students. As is evident in Table 2, the high school groups are typical of the international composition of schools in the Washington, D.C. area: the students' native languages include ten languages other than English. The linguistic diversity of these classes contributed to the students' experience in language learning and their style of approaching language learning tasks. There was a slight age difference between the second and third year high school groups. The Year 3 group was younger, and predominantly male (66% of one class was male).

At the college level, students in an Intensive Japanese program took part in the study. In Year 1, students in level 1 and level 3 Japanese were interviewed about their learning strategies. In Year 2, 20 students in level 1 Intensive Japanese were given instruction in learning strategies. In Year 3, two classes were involved, one treatment and one control group, with 30 students altogether. The college level classes consisted of undergraduates approximately 18 years old and mostly in their first year of college. There were more female than male students and some of the college students were native speakers of languages other than English, although at a lower percentage than in the high school classes.

Instructional Approaches and Materials

In order to understand the instructional approaches to Japanese it is useful to understand the options available in teaching the writing system. There are four ways of writing Japanese: Romaji refers to the use of the Latin alphabet to represent the sounds of Japanese; Hiragana refers to the syllabary that is derived from Chinese characters and is commonly used in Japan for spelling words of indigenous Japanese origin and function words; Katakana refers to the syllabary derived from Hiragana that represents foreign words, phonetic spellings, botanical names and onomatopoeic words; and Kanji refers to the borrowed Chinese characters that are used to represent words or concepts that the Japanese and Chinese languages had in common. Examples of these forms of writing are shown in Figure 2. When the two syllabaries Hiragana and Katakana are referred to together, the term Kana is used.

Figure 2. The four types of Japanese writing.

Romaji:	konnichiwa	(Hello)
Hiragana:	こんにちは	(Hello)
Katakana:	ホノルル	(Honolulu)
Kanji:	日本語	(Japanese language)

A major difference in the approaches used at the high school and college levels was the timing of introduction to and use of Japanese characters. In some cases, high school classes learned the Japanese writing systems earlier than the college classes. The textbooks and materials used in the high school classes were written primarily in Hiragana, while the college text was written entirely in Romaji.

The high school classes in both Year 2 and Year 3 met five days a week for 50 minutes each day. The Year 2 high school class was gradually introduced to Katakana and did not begin learning Kanji until late in the beginning year. The high school curriculum during year 2 was centered around a structural textbook, Japanese Now by Esther M. T. Sato, Loren I. Shishido and Masako Sakihara. Classroom activities included the repetition of dialogues and vocabulary items and the production of grammatical substitution and transformation drills. Assessment included an oral interview and written tests requiring students to use the Japanese characters described above.

In Year 3, the high school class was introduced to Kanji from the beginning of the first semester, along with Hiragana, which was the main form of writing taught. The high school classes in year 3 were taught with a proficiency-based curriculum. This approach is aimed at developing native-like proficiency through integrated learning tasks that are centered around thematic units. For example, the first theme is Alphabet, which requires students to learn about the Japanese writing system and to memorize the syllables through songs and games. Another theme was School, which dealt with time and schedules, names of the subjects taught in school, and descriptions of students' feelings about their classes. The curriculum used in the year 3 high school class was written by the instructor. Materials that were given to the students in a packet

covering each theme were written exclusively in Japanese characters. A computer was available in one of the high school classrooms with software for practicing Kanji and Kana. Students were allowed to use this computer when their daily assignments had been completed.

Assessment in the Year 3 high school class was carried out through written tests and individual oral evaluations. Students produced written assignments in Japanese characters and, at one school, had the opportunity to travel to Japan at the end of the school year.

The college classes met four days a week for a total of 6 instructional hours, with an additional drill session one day a week. This schedule is referred to as intensive language study and is generally very demanding of the students in terms of the time and energy necessary to succeed in the class.

At the college level, the textbook was written in Romaji and students were taught Hiragana later in the first semester. The college students had a supplemental text for learning Kanji and Kana and were tested during the second semester on reading skills in these written forms.

The primary textbook for the college classes was Japanese: The Spoken Language by Eleanor Harz Jorden and Mari Noda. This textbook is based on "core conversations;" exemplary dialogues showing how each lesson's grammatical structures and vocabulary are used. The college students were responsible for memorizing these conversations and performing them in front of the class with a classmate. Each week, 3 or 4 conversations were covered as part of one lesson. Each conversation consisted of approximately 4 lines for each person. Students had audiotapes of the conversations, which they could listen to at home or in the language lab. In class they were shown video tapes of each core conversation.

Assessment of the college students was conducted on a regular basis through oral interviews. These were ten minute individual sessions with the teacher in which the grammatical structures of the previous lessons were used for simulated conversations.

Instruments

Instruments developed to collect individual student data included: a *Learning Strategies Questionnaire (LSQ)*, a *Self-Efficacy Questionnaire (SEQ)*, a *Background Questionnaire*, a *Test of Language (TL)*, a *Midyear Questionnaire (Year 2) / Midyear Evaluation (Year 3)* and a *Teacher Ranking Scale (RK)*. Data were collected from teachers through a *Teacher Interview Guide*. An *Observation Summary Form* was used to code classroom observations. Appendix A contains examples of these instruments.

The process of developing these instruments began with classroom observations in Fall 1990. These observations were conducted to gain an understanding of the objectives and the types of language learning tasks in these high school and college courses. Researchers then conducted interviews with students at the high school and college level who were in the first and third years of studying Japanese. These students were asked what techniques they used for learning Japanese and what the most difficult requirements of the course were for them.

The information gained from student interviews in Year 1 was used to develop the Learning Strategies Questionnaire (LSQ), which asked students to indicate the frequency of their application of various learning strategies to particular tasks. The format of the LSQ was modeled on measures developed to collect information on students' use of learning strategies in previous studies (e.g., Chamot et al., 1987; 1988a; 1988b; O'Malley et al., 1985a; 1985b; Oxford, 1986). Students chose an adverb of frequency on a five-point Likert-type scale, ranging from *never* to

almost always, to indicate how often they used the strategic behavior described for each language learning task. An example of a statement on the vocabulary section of the LSQ is: "I try to relate the vocabulary to myself, my interests, and personal experiences." This statement reflects the cognitive strategy Elaboration. On the speaking section of the LSQ, an item states: "I watch the listener's reaction to what I've said to see if I'm making sense." This shows use of the metacognitive strategy Self-Monitoring.

Distractor items, which described negative behaviors or learning techniques not included in the learning strategies instruction, were added to the LSQ to ensure that students did not respond only in ways they thought would please the researcher. One such distractor was "When I don't understand something the teacher says, I tend to tune out." The student who responds positively to this statement is not using the Directed Attention strategy.

The LSQ was pilot-tested in the spring of 1991 with students in the college setting and at two high schools. As part of this pilot-testing, students' LSQ responses were compared to their interview responses, so that the language used on the LSQ could be revised to capture the ways in which students themselves describe their use strategy use.

The LSQ was administered as a pretest and a posttest for Years 2 and 3 of the study. Changes were made in the LSQ to reflect the different types of curricula that were used in the different levels and school districts participating in the study. For example, the first version of the LSQ included questions about listening to tapes that accompanied the textbook. These questions were deemed appropriate for both the college and high school classes, which were using the same textbook during Year 1 of the study. When the high school level class changed to a different textbook, these questions became irrelevant. They were eliminated from the LSQ

posttest given in Year 2 to the high school group. It was then found that many students in the college level class were not using the tapes, either, despite instructions to do so. Therefore, the LSQ given in Year 3 did not include any question about techniques for listening to the tapes.

Test of internal consistency reliability were performed on the LSQ as administered in Years 2 and 3. The coefficients of the Year 2 LSQ posttest were .65 (college) and .79 (high school), and the coefficients for the Year 3 LSQ pretest (the same measure was given at posttest) were .84 (college) and .89 (high school). These coefficients show that the LSQ is reliable in that the individual items measure the same thing.

To measure an affective component of language learning, a *Self-Efficacy Questionnaire* (SEQ) was developed and pilot-tested. The SEQ asked students to indicate on a 0-100 point scale the degree to which they feel able to perform specific language learning tasks. Based on previous questionnaires developed by Schunk (1981) and Zimmermann and Pons (1986), this questionnaire was aimed at quantifying students' confidence as language learners. Students were presented with material and tasks geared to beginning level instruction, such as a list of vocabulary to be learned, a dialogue to be memorized, or a social situation in which the target language had to be used. The material related to each type of task was shown on an overhead transparency for five seconds, which was long enough for students to recognize the type of task, but not to try to accomplish it. Students were then asked to indicate how well they felt they could perform specific activities related to each task in the amount of time they would usually have in their language class. The choices on the 100 point scale ranged from *not sure at all* (0) to *very sure* (100) that they could perform each activity. Specifically, the SEQ asked students to circle the number to indicate how well they thought they could, for a Kanji vocabulary list,

"...read sentences that contain these Kanji and understand what the sentences mean; ...learn to write each of the words in a sentence," for a dialogue in Hiragana, "...correctly use phrases from the dialogue in other situations," for the social situation, "...solve problems that arise in communication; ...say and do things that are culturally correct according to Japanese culture."

Tests of internal consistency reliability were performed on the SEQ as it was administered in Years 2 and 3. The coefficients for the Year 2 posttest were .70 (college) and .96 (high school) and for the Year 3 pretest (the same as the test given at posttest) were .96 (college) and .94 (high school). These are relatively high, indicating that the individual items that comprise the test are measuring the same thing.

A *Background Questionnaire* was given to each participant in the study to collect demographic information such as age, gender, and the amount of experience with language learning. Table 2 shows the information collected from the Background Questionnaires. The purpose of collecting information on the students' language learning experiences was to identify students with prior experience in studying Japanese who were nevertheless enrolled in a beginning level class. For example, students at the college level who had studied Japanese in high school did have an advantage to begin with, but the college level curriculum was presented at such a rapid pace that this initial distinction between students quickly disappeared.

A *Test of Language* (TL) was developed for each instructional setting and was revised to reflect each change in curriculum that occurred with new participants in the project. The TL included reading and listening tasks and represented a cumulative test for the beginning year of Japanese instruction. The TL was geared to the instructional level of participating students; for

example, because the high school students were not taught Romaji, they were not asked any questions which pertained to Romaji or which required them to use it.

At the college level, the TL was given in two versions, a pretest and a posttest. The rationale for these versions was to avoid overwhelming students at the beginning of the year with difficult written material in Japanese. The college TL pretest presented individual spoken words for listening comprehension, did not include any Kanji, and tested for understanding of only single words written in Hiragana. The college TL posttest included short conversations in Japanese for listening comprehension and had paragraphs written with Kanji for reading comprehension. Both the pretest and the posttest forms of the college level TL were administered in Spring 1991 in college classrooms and were revised based on item analysis and on recommendations of Japanese faculty. The revised tests were piloted a second time with college students in a 1991 summer program. The same TL was given as a pretest and posttest to high school students because the amount of material covered in one year was not as great as at the college level.

A *Midyear Questionnaire* was developed in Year 2 to find out how much of the strategies instruction was remembered by the students after the semester break, and to reveal how much they were using the strategies on their own. The Year 2 Midyear Questionnaire gave the name and definition of each strategy that had been taught and asked whether the student used the strategy in school or at home. An opened-ended question asked why the student did or did not use the strategy.

In Year 3, a different Midyear Questionnaire was developed for the college class, to assess the needs of the college students and problems they encountered in learning Japanese.

Students used a five-point Likert-type scale to indicate how often they had problems in specific areas of learning Japanese; response options ranged from *never* to *always*. The first part of the Year 3 Midyear Questionnaire dealt with problems in speaking and listening, and the other part dealt with problems in reading and general learning activities for Japanese.

Teachers and researchers jointly developed a set of criteria to rank students according to achievement in the class: a ranking of high, medium, or low indicated the student's general achievement in Japanese. These data are referred to as *Teacher Ranking* (RK).

Development of Resource Guides

This study proposed to produce a resource guide that could be used by Japanese teachers for instructing their students in learning strategies for Japanese. This resource guide was to be based on guides previously developed by Chamot, Thompson, Küpper, Barnhardt, and Barrueta (1990) and was reviewed by the Japanese instructors and consultants during Year 1. High school and the college instructors worked with the research staff to coordinate the learning strategies lessons with their own syllabi and textbooks, pointing out levels at which the lessons would be most appropriate and recommending additional objectives for which learning strategies lessons could be developed. The current project's resource guide was closely matched to the specific curriculum of each level of Japanese and to the goals of the Japanese programs at the schools involved in the study. The strategies instruction worksheets in the resource guides had to be designed according to what the students could read in Japanese. As mentioned in the Instructional Approaches and Materials section, reading and writing in Hiragana were emphasized at the high school level, whereas the college classes used a textbook written in Romaji. Because the college Japanese program emphasized speaking and listening skills, strategies that help with listening comprehension and oral communication were chosen for instruction. In Year 2, the high school class was concerned with the development of basic vocabulary and knowledge of grammatical structures. Therefore, the strategies chosen for the high school class were intended to help with memorizing new material through elaboration, imagery, and focusing attention.

Procedures

At the beginning of Year 1, teachers were approached and asked to participate in the study. Permission was requested from the school districts in which interested teachers taught. Initial meetings with the teachers involved explanation of learning strategies and discussion of how the strategies instruction could be carried out in the particular classes taught by participating teachers.

During each year of the study, high school students were asked to obtain parental permission for testing and participation in the study. The school districts gave approval for the research to be carried out in their high schools.

Data Collection

Pretests were group-administered in early October of Year 2 and Year 3, including the *Background Questionnaire*, *Test of Language (TL)*, *Learning Strategies Questionnaire (LSQ)*, and *Self-Efficacy Questionnaire (SEQ)*. On a regular basis throughout the school year, students were given strategy instruction worksheets that were collected and returned to the researchers. These worksheets often asked students for their comments on learning strategies and for their reactions to the strategy instruction. The student responses on these worksheets were used as a supplementary measure of independent use of learning strategies.

At the end of each school year, each class was post-tested with the TL to measure students' achievement in Japanese. The LSQ was administered to determine how their strategy use had changed over the year, and the SEQ was given to find out if their confidence level had changed after their experience in class, including the experience of receiving strategy instruction. Teachers were asked to rank students according to the Teacher Ranking (RK) scale.

At the end of Year 3, teachers were interviewed about their experiences teaching learning strategies and their role in the research project. These interviews were conducted to collect general teacher evaluations of the current study and to provide information to help in developing further language learning strategies instruction projects.

Classroom Observations. Throughout each school year, each class was observed in the process of receiving the language learning strategies instruction and practicing the strategies. During Year 3, observations in the two college classes (control and treatment), and the two high school classes were conducted using the observation summary form (Appendix A-4). The benefit of classroom observation was especially apparent at the high school level, as students had questions about the study's purpose that could be answered directly by the researchers. This observation also allowed the researchers to make adjustments in the resource guide depending on the students' pace and the presentation of themes throughout the school year. Frequent researcher meetings with the new high school instructor (in Year 3) provided opportunities for further explanation of strategy instruction and for the development of additional activities to reinforce strategies that had been taught.

At the college level, observations allowed the researchers to compare the instructional approaches of the control teachers and the treatment teachers. Each section of Intensive Level One Japanese at the college level was team-taught by two instructors. One instructor taught two days of the week and the other taught for another two days. Classroom observations also gave the researcher insights into which activities worked well with the particular group of students in the treatment class, and they provided feedback on the teachers' method of explaining the strategy that was being presented. If, for example, the scripted strategy instruction was unclear,

it might cause the teacher to give a misleading explanation, and the observation would help to reveal the problem so the lesson could be revised.

Data Analyses

At the end of each school year for Years 2 and 3, data were analyzed to determine the relationships between strategy use, self-efficacy, and language proficiency/achievement. Correlational analyses were performed with posttests of the following instruments: LSQ and SEQ; LSQ and RK, TL and LSQ; and TL and RK. T-tests were performed between the pretests and posttests of the LSQ, TL and SEQ, to indicate overall gains. The students' use of strategies also was analyzed by calculating means for the individual strategies represented in the LSQ. In addition, the use of strategies by the categories they fall into was analyzed; that is, the metacognitive, cognitive, and social-affective strategies were separated out to see if patterns of use could be observed.

During the quasi-experimental instructional study of Year 3 (at the college level) one class received instruction in strategies and the other did not. T-tests and/or ANCOVAs were done on all of the measures given as pretests and posttests to these two groups.

Chapter III: Results

The results of the Learning Strategies in Japanese Foreign Language Instruction study are organized here by research question. Results from data analyses of the two instructional years (Year 2 and 3 of the study) are presented separately, as are results from high school and college classes (see section on Instructional Approaches and Materials). The main differences between the two years were in the nature of the high school curriculum and the number of students participating at both the high school and college levels (see Table 2).

Selection of Language Learning Strategies for Japanese Instruction

Research Question 1:

- Which learning strategies are selected by Japanese instructors as most beneficial to their students?

This question was answered in the course of developing and pilot-testing resource guides for learning strategies instruction for Japanese. A preliminary resource guide was based on ones previously developed by Chamot et al. (1990). Japanese instructors met with the researchers to identify the strategies in the guide that they felt would be most beneficial to students of Japanese; they also suggested additional strategies that they thought would help their students. The language learning strategies selected for use in Year 1 and the definitions given to students are presented in Table 3.

Table 3

Language Learning Strategies Selected for Use in Year 1

Metacognitive Strategies:	
Directed Attention (<i>Syuutyuu</i>)	Deciding in advance to pay attention to a learning activity and to ignore distractions
Selective Attention (<i>Pointosyuutyuu</i>)	Deciding to pay attention to specific aspects of a language listening or reading activity
Cognitive Strategies:	
Contextualization (<i>Bamen Zukuri</i>)	Using real objects to associate meanings with words or phrases, acting out words or phrases; putting language into its real-life context
Creative Repetition	Varying the ways you repeat; changing your tone, volume, speed, etc.
Grouping (<i>Nakamawake</i>)	Classifying and sorting vocabulary words in a way that is personally meaningful to you, remembering words or other information based on previous groupings
Imagery (<i>Imeezi</i>)	Using actual pictures or forming a specific mental image to help remember new material
Personalization (<i>Genzituka</i>)	Making meaningful personal associations with new material
Prediction (<i>Yoki</i>)	Using what you know to predict what will be said in an exchange or to anticipate what might be said in discussion of a topic
Silent Repetition (<i>Anysyoo</i>)	Letting the most recent sound to enter your ears echo, or play back, for a few seconds after hearing it, in order to gain more time in which to process the information and understand it fully
Social-Affective Strategies	
Questioning (<i>Chekku</i>)	Asking for confirmation that you have correctly understood another's speech; showing your understanding of what has been said to you without committing yourself to a response immediately
Cooperation	Working together with classmates in a non-competitive manner to help each other practice and improve language skills

As part of the development of the resource guide in Year 1, Japanese names were given to some of the strategies because teachers involved in the project wanted to be able to refer to the strategies without switching into English. Once instruction got underway in Year 2, the students at the high school level did not accept the use of Japanese names, so the teacher decided to use only English names for the strategies. Students saw the Japanese names as simply additional vocabulary words they had to learn, and the Japanese names were not meaningful to the students. In the college class, teachers continued to use Japanese names for the strategies during Year 2. This allowed them to use Japanese as the only language of instruction, yet still remind students to use a particular strategy for a language task. However, it became evident that the college students did not like to use the Japanese names for strategies, either. An instructor at the college level suggested that it didn't make sense for students to use the Japanese strategy names when they weren't *thinking* in Japanese about their strategies. In Year 3, teachers at both college and high school levels decided that they would use only the English names for strategies.

The number of strategies was reduced during Year 3, and an overall framework was used to present the strategies. This is based on a problem-solving process model, which represents metacognitive control over strategy use. This model (presented in Figure 1) was accompanied by an illustration of a mountain climber; the analogy was made between the tasks performed by language learner and a mountain climber in achieving their goals.

During Year 3, the high school curriculum was proficiency-based, with a greater focus on listening skills. Therefore, additional activities directed at introducing and practicing strategies for listening to Japanese were included in the Year 3 high school resource guide. The

Japanese instructor for the Year 3 high school class suggested applications of strategies to her proficiency-based curriculum. Examples of how learning strategies instruction was integrated into the specific goals and activities of the high school and college classrooms are provided in Appendix B.

Implementation of Language Learning Strategies Instruction

Research Question 2:

- How can learning strategies be taught to high school and college students of Japanese?

This question was answered over the course of Year 2, as a process evolved for presenting learning strategies. Following administration of the pretests, learning strategies instruction began with several worksheets that asked students to reflect on how language learning is different from learning other subjects, and to report on the learning techniques they had used in their first month of studying Japanese (see Worksheet 2 in Appendix B). These first worksheets and others given throughout the year included open-ended questions such as: "What do you do to help yourself remember new words in Japanese?" For example, one student answered, "I picture the object in my mind as I look at the word," and another replied, "I group vocabulary for certain ideas, like family names, travel words, colors, etc." The responses on these worksheets provided information on the students' individual approaches to learning. Some of these student comments can be found in Appendix C.

After the students had been made aware of the unique aspects involved in language learning as compared to learning other subjects (Worksheet 1 in Appendix B), they were told about the value of learning strategies for improving their language learning ability. Individual

strategies were then introduced one at a time. Each strategy was first explicitly described, then modeled by the teacher. Students were then led through an activity in which the strategy could be used, and they were asked to respond to questions on worksheets about the value of the strategy for their own study of Japanese. Specific activities were suggested to practice strategies in the classroom or outside of school. The introduction to each strategy and specific practice activities are described in the Resource Guides, which accompany this report. These guides were based on guides developed by members of the same research team for teaching learning strategies in the French, Russian, or Spanish classroom (Chamot et al. 1990).

Integration of Language Learning strategies Instruction with Curricula

As Year 2 progressed, the teachers involved with the study continued to provide their lesson plans to the researchers, who wrote strategy lessons that were closely blended with daily class work. Certain elements of the curriculum for Japanese seemed to lend themselves to the use of particular strategies. For example, when numbers were first taught at the college level, Silent Repetition was introduced. Students were told to let the sound of the number echo in their mind, or to play it back silently to themselves, until they could process it and figure out what number was being said. Then, when the numeral quantifier *-tu* was taught, the use of Selective Attention was suggested. Students were asked to listen to a series of sentences. In each sentence, they were to listen for the number by paying attention to what word was attached to the suffix *-tu*. The use of other numeral quantifiers was practiced through Contextualization. Students were asked to hold props such as newspapers, apples, books, sheets of paper, and so on, while they said the number of items and used the correct numeral quantifier, which, in Japanese, changes with the type of object being referred to.

Later in the year, when phone numbers occurred in the college level dialogues, Silent Repetition was practiced again, in an information gap activity that required students to ask each other for phone numbers of local businesses. The students were instructed to wait for a moment before writing down the number, in order to let it "echo" in their mind. They were given a reason for the practice of this strategy: "There may be times when you can't ask for a repetition by the speaker, such as when hearing a number on the radio or getting a recording on the telephone" (see Worksheets 21A & 21B in Appendix B).

Another strategy that was found especially useful for the college level curriculum was Prediction, which was used to improve listening comprehension when working with the tapes that accompany the textbook. Student Worksheet 21C (Appendix B) shows how this strategy was applied: First, students were told the situation in the tape -- a woman was calling a university to speak to a professor. Then students were asked to think of the type of language they might hear; in this case, it would be polite, using ritual phrases typical of telephone conversations. Some specific questions were asked about the conversation, and students were asked to predict what words might be used in answer to those questions. The teacher then played the tape, and the students listened for the answers to the questions. Students wrote the answers on the worksheet, comparing their original predictions with what they heard.

In Year 3, the proficiency-based high school curriculum centered on themes such as school, maps, weather, the environment, animals, and so on. This curriculum was focused on first developing listening skills, so strategies were introduced to help with listening tasks. An activity that was used to practice Prediction made a strong impression on the students. First, their teacher played a tape that was provided by the researchers, without any explanation of its

contents. Then, after the students had complained that they did not understand any of it, they were told that it was a weather report and were given a map showing locations of the cities talked about in the report. Students were asked to think of some words they usually heard in weather reports and to list these on a worksheet in English. This activity was explicitly described as Prediction. The teacher helped students to translate the words into Japanese. The report was played again, and the students were instructed to use Selective Attention to listen for the words they predicted would be in the report and to try to find out what the weather would be like in the cities on the map. After hearing the recording again, the students were pleased to discover that they could understand parts of it, through combining the strategies of Prediction and Selective Attention.

When the health theme was being taught in Year 3 high school class, a vocabulary learning activity was used to introduce Grouping. Students were given a set of cards that had pictures of parts of the body on them. They were asked to group the cards based on criteria they chose, and then to use these groupings to study the vocabulary. Students chose such aspects of the vocabulary as the sound of the Japanese word, the location of the part of the body, and the shape of the Hiragana to group certain cards together. One reason this activity was successful with the high school class may have been because they had a tangible object to manipulate. Also, the students appreciated being given the choice of what characteristic of the vocabulary they would use in associating the groups of cards.

There were two characteristics of the Year 3 high school classes that influenced the type of in-class activities presented by the instructor: the classes were on the average younger than the Year 2 high school students (average age for Year 2 was 16 years old, and for Year 3 was

14 years old) and one class was predominantly male (one class had 66% males). These factors affected the type of learning strategies instruction presented by increasing the emphasis on physical activity and manipulatives for practicing strategies. In contrast, the maturity of the college level class facilitated the presentation of learning strategies instruction that required more personal reflection and concentration.

Classroom Observations of Teachers' Implementation of Strategies Instruction

Researchers observed classes on a regular basis to learn how teachers were implementing the strategies lessons they had been given and to gauge student response to the introduction and practice of particular strategies. A classroom Observation Summary (Appendix A-4) was used in addition to descriptive notes. The observation of strategies instruction was planned to occur when the teacher was introducing a new strategy, so the researchers could see how the teacher explained the strategy. For example, in Year 2, the high school teacher devised this simple way of presenting Grouping: she asked students to think of how many ways the class could be divided into groups; male vs. female, those wearing skirts vs. those wearing pants, those with long hair vs. those with short hair, tall vs. short, etc. The advantage of this activity was that it made clear to the students that Grouping doesn't always have to be done in one particular way. Before the activity, students had suggested grouping words into categories such as nouns, verbs, and adjectives, as is usually done in textbooks. After this activity, the teacher presented a list of words to be divided into groups, and students used more uncommon categories such as words dealing with school vs. words that don't deal with school. After students had completed the worksheet on Grouping, and the teacher had completed the script written to accompany the strategy instruction, the teacher suggested other applications for the strategy; they could use it

to study for their upcoming test, or to study Hiragana. She gave examples of some Hiragana symbols that are easily confused, and showed how studying them in groups could help to eliminate the confusion. This observation of the presentation of Grouping led into the next week's presentation of another worksheet on Grouping in relation to the study of Hiragana (see Appendix B - 1).

An observation of the Year 3 high school class coincided with a pair activity. In pairs, the students were to complete a schedule of each others' classes by asking questions and answering in Japanese. The students seemed unaccustomed to this type of communicative activity. Some of them seemed to approach the task as simply a matter of getting the schedule filled out, one way or another. These students asked each other questions and answered in English, thus avoiding the practice in speaking Japanese they were supposed to be having. As a result of this experience, the teacher developed another method of conducting pair activities so that the students could be more closely monitored as they practiced. This method required the students to circulate along the front row of desks and talk to students seated in the row while the teacher walked in back of the row and observed. Knowing about this technique helped the researchers to plan strategies instruction so that strategies could be practiced in ways that students were comfortable with.

One problem with the way that the strategies lesson plans were written in Year 2 was that there was a large amount of text that the teachers had to put into their own words. Observations revealed that sometimes the teachers did not have the time to commit the scripts to memory and they were forced to rely on reading directly from the script. This gave the strategies lessons less validity with the students; they saw them as something "extra" or something "outside of our

coursework" and therefore discounted the need to pay close attention to the lessons. Because of this problem, the strategy lessons in Year 3 were written with less text for the teachers and with more explanations on the student worksheets themselves.

Observations of the college class showed that the teachers had many ideas for making their classes more lively and giving students meaningful practice opportunities. One of the college teachers had students play a Japanese children's game in which one student sat on the floor, while the others walked in a circle around the student singing a song. When the song stopped, the seated student had to guess the name of the person directly behind him or her. This was done by asking, in Japanese, "Who is it?" with the response "It's me" all that was given. The seated student had to guess the person from the voice. This could have been utilized as a opportunity to practice the language in a realistic situation while introducing the strategy Contextualization. However, this class session was not far enough into the study to begin discussing individual strategies.

The control and treatment Year 3 college classes were observed and found to have similar instruction in some ways. The students in all of the sections of Level One Japanese were responsible for learning the core conversations that accompanied each chapter of their textbook. The teachers for both the control class as well as the treatment (strategies instruction) class brought in objects that students could use in their role-play of the core conversations. One dialogue involved choosing a piece of candy; on this day the teacher for the control class brought in candy of various colors so the students could state which color they wanted in Japanese. Likewise, when a core conversation involved the purchase of some stationary items, the treatment

class's teacher brought in envelopes, notebooks, and so on for the students to hold as they acted out the conversation.

Whenever the treatment class was asked to do a learning task which could be facilitated through strategies use, their teachers took advantage of opportunities to mention the strategies explicitly. This was not done in the control class. In addition, the treatment class teachers presented the worksheets developed by the researchers and set up specific activities that would allow for the practice of the strategies presented on the worksheets.

In general, observations were useful for keeping the researchers current on the progress of the class so that strategy lessons could be presented that coincided with the students' changing abilities. The observations also allowed students to ask questions of the researcher about the research project and to make comments on the particular activities used to practice learning strategies.

Teacher Interviews and Comments

Teacher interviews about the implementation of strategies instruction were conducted at the end of Year 3 with high school and college teachers. These interviews provided extensive qualitative information regarding the language learning strategies instruction and indicated future directions for research and professional development in strategies instruction. The three teachers who taught strategies in Year 3 were interviewed according to a set of questions that were developed by the research staff (Appendix A-6). The interviews covered two main areas: the strategies instruction as teachers presented it in their classrooms, and the professional development they received as participants in this study. Several useful suggestions for future strategy instruction programs were made by the teachers, including feedback on the use of

strategies in their classrooms, training workshop ideas, and use of videotaped material for strategy instruction. Key points from the teacher comments are described below.

In their responses to questions about professional development, the high school and college teachers alike expressed the need for more opportunities to observe other teachers engaged in strategies instruction. A teacher explained:

I really didn't have any example or model to follow; that would help in the future. I'd like to see what others are doing by observing classes where they are using strategies.

Future studies are planned by the research team to produce videos of strategies instruction to be used for professional development.

College teacher comments. The greatest benefit of the strategies instruction for the college students, as seen by one of their teachers, concerned the affective factor of language learning:

It helped the students to think of how they can learn Japanese...it was good to have discussion in the classroom to talk about how they can learn a language in a different way, using strategies. I think a lot of people were scared learning this language because it's really difficult. They can share their thoughts, they can share their learning styles, methods, and such; I thought it was really helpful for them to control their fear, and share the learning experience together.

The rapid pace of the Japanese instruction at the college level was cited by teachers as the main factor inhibiting the presentation of language learning strategies instruction. They did not have enough time to practice more than one application of some strategies; thus students did not always remember the purpose of every strategy introduced. One way that the college teachers dealt with the lack of class time for explaining strategies was to use individual sessions during their office hours with students who were having difficulty to provide further explanations.

Teachers were asked in the interviews how applicable strategies instruction is to the four skills taught in language classes: listening, speaking, reading, and writing. The teachers felt that

it is easier to see the benefits of using strategies when they are applied to reading and writing, and their students would have been more impressed with the usefulness of strategies for those tasks. Because the activities focused on in class were limited to the development of listening and speaking skills, teachers could not practice the application of strategies to reading and writing.

One teacher explained:

You can use the strategies for any skill, but I think it's easier for them to learn the strategies for writing and reading than for listening and speaking. In writing and reading, it's written so they can just scientifically apply the strategies and it works. But in speaking and listening, they have emotions to control, and they have to think about what they're going to say, what they're going to hear. It involves more emotional, mental processes so it's hard for them to see if the strategies are working.

Our director wanted to emphasize speaking and listening, but I think it's easier to teach the strategies in reading and writing and then move on to speaking and listening. That might have helped. Maybe it's a more logical way of doing it, since our school doesn't emphasize reading and writing: if we use the strategy and see how easy it is to learn reading and writing, although we don't spend as much time on it...and then we go on to speaking and listening...having convinced them that strategies actually work; that probably would be better.

During Year 1, teachers had selected a set of strategies they thought would be the most useful for students of Japanese. In the teacher interviews, the Year 3 teachers were asked to select a few strategies that were, in hindsight, the most useful. The college level teachers chose Selective Attention, Prediction, and Contextualization as the strategies that proved to help their students more than any others. Selective Attention is categorized as a metacognitive strategy, that is, it involves planning for learning by deciding in advance to attend to specific aspects of language input in performance of a language task. This strategy is usually taught in conjunction with the cognitive strategy Prediction, which involves predicting the language input to which the learner will selectively attend. In the listening tasks that are required of the college level classes,

these two strategies can be advantageous for the students' comprehension of the video and audiotapes that accompany the text. These tapes are recorded by native speakers talking at a rapid pace, and frequently contain ellipses, making it difficult to follow the conversations.

The other strategy chosen as most helpful by the teachers was Contextualization, which involves using real objects to associate meanings with words or phrases and acting out words or phrases, thus putting the language being learned into a realistic context. Because the course content at the college level revolves around the memorization of core conversations, this strategy was used by the college students every day. It was through the use of Contextualization that the teachers tried to make the conversations more meaningful to their students by bringing in props to be used by students as they acted out the core conversations in front of the class. The student performances were an almost daily feature of the college program, and when students had the opportunity to act out the conversations more dramatically, they seemed to enjoy performing them more.

One of the problems that arises when providing learning strategies instruction at the beginning level of any foreign language is the need for teachers to explain the strategies in English. Teachers who are using a communicative style of teaching try to use the target language in class as much as possible. The teachers involved in this study felt awkward when the time came to explain strategies in English; switching out of Japanese seemed to disturb the flow of their instruction. One teacher described her experience with using English in class:

We ended up speaking English to explain learning strategies. That's another reason that goes back to the problem of learning strategies being extra, because you don't want to use English, so you leave the explanation for the end of the lesson, or the beginning of the lesson, and then in the middle of the lesson you try not to speak English. Somehow, there's some good way to integrate this.

Giving the strategies Japanese names was one way that this problem was addressed. Teachers felt that if they could still speak Japanese while reminding students to use strategies, it would help them to fit the strategy instruction and practice more closely with their curriculum. At the college level, the students were at first willing to learn the strategy names in Japanese, but seemed to prefer using the English names to discuss them. A possible reason for the students' reluctance to use Japanese strategy names is that they were not *thinking* in Japanese about their learning processes. If they had been, using the Japanese strategy names would have made sense. But since they were thinking in English, they naturally used strategy names in English to describe their thought processes.

The problem of having to use English to describe strategies and lead students through practice in strategies seems to be more serious with a language like Japanese than it is with languages that are more closely related to English. In a parallel study with learners of Spanish (conducted by Georgetown's Language Research Projects), some teachers were able to use the target language to conduct the strategies instruction and used only Spanish names for the strategies. Still, even the Spanish teachers were concerned that they had to use some English for the initial explanation and modeling of strategies (Chamot, Barnhardt, Carbonaro & El-Dinary, 1993). When asked in the interviews about the possibility of using only Japanese to introduce and explain language learning strategies, the teachers saw the potential for problems: [If we used Japanese to explain] "the bad students would not pick it up, while the effective students would be the only ones who pick it up." Future research at more advanced levels of Japanese will address the question of to what extent the target language can be used for strategies instruction.

High school teacher comments. At the high school level, the teacher described how she tailored her instruction for the needs of her students for strategies of different types:

I try to reach different types of students by different learning strategies. Some students are extremely weak visually, then I emphasize the listening and speaking part. If some student is extremely strong visually but not in the spoken language, then I encourage them to speak, even if it's only a little bit. Once I identify particular student characteristics, I try to cover them with different strategies. I think you have to approach them so you can reach the maximum number of students. If you apply only one particular strategy you miss so many students.

When asked about the most helpful strategy for her students, the high school teacher stated that the most popular type of strategies instruction activities were kinesthetic -- those involving manipulation of vocabulary cards or pictures, and videos.

Definitely the videotape is one of the mechanisms we should use more. I think also that the environment they grew up in, with TV sets, their ability to learn is much more keen than my generation. I cannot have that kind of sense of concentration watching TV; I prefer reading to get any deep meaning. But these younger people can achieve extremely deep thinking even by watching TV. They can involve themselves so much in the screen...That's a new learning skill I think they must be developing, growing up with TV sets.

The talent students have for learning from a video screen is one that the teacher recommends be utilized for the future presentation of strategies instruction:

I think more videotapes would help [in the teacher's understanding of learning strategies] and it would be helpful to have a videotape to show the students. If they could see what they're expected to do, and where they might end up, it would make it clearer to them. Seeing another group of students at the beginning and end of strategies instruction, and showing how they got there, would help.

Student's Use and Perception of Language Learning Strategies

Independent Use of Language Learning Strategies

Research Question 3, regarding student use of learning strategies, has two parts:

- Do students instructed in learning strategies apply the strategies independently?
- Do they continue to apply them in subsequent levels of language study?

Each part is addressed separately in this section. Independent use of strategies refers to strategies use in language learning contexts outside of the strategies lessons in which students were instructed to use the strategies. The term "subsequent levels" of language study refers to the second year (Level Two) of Japanese study for students who had strategies instruction during their first year of Japanese.

Year 1 (1990-1991) Data on Independent Use of Language Learning Strategies

Because the activities of the first year were to develop instruments and a resource guide for strategies instruction, no data on the relationship of strategies instruction to independent use of strategies was collected. However, interviews conducted in Year 1 revealed that all students had some techniques for making the task of learning Japanese easier. These techniques were not described by the students as particular strategies, however, since they had not received any strategies instruction.

Year 2 (1991-1992) Data on Independent Use of Language Learning Strategies

Results on independent use of strategies by Year 2 high school and college students. In Year 2, students described how they studied the various elements of their Japanese curriculum (vocabulary, speaking, listening, reading) on worksheets (see Appendix B) and on the *Midyear Questionnaire* in Year 2 (see Appendix A). The students' descriptions of their techniques for

studying Japanese were coded for strategies. These data will be referred to henceforth as self-reported strategies. At the high school level, the total number of self-reported strategies correlated with the corresponding *Learning Strategies Questionnaire* (LSQ) data in all three strategy categories: metacognitive strategies ($r = .425, p = .050$), cognitive strategies ($r = .626, p = .005$), and social-affective strategies ($r = .466, p = .034$). At the college level, correlations were found between total self-reported strategies and total LSQ average ($r = .672, p = .002$), and also between self-reported social-affective strategies and social-affective strategies on the LSQ ($r = .489, p = .038$).

Based on their own descriptions, students seemed to apply strategies independently and had many more strategies at their disposal than the set that was taught to them. Many of the students reported strategies that were creative and individual. For example, whereas some students relied on rote memorization, others made up stories with their new words. One student did not believe in using phonetic spelling of Japanese words but another relied on the phonetic spellings to remember how the words sound. One student imagined a Japanese family and visualized the family members acting out scenes connected with new vocabulary words.

Table 4 compares the self-reported strategies of Year 2 high school and college students. It is apparent from the important position of Kinesthetic/Auditory Practice and of Repetition that rote memorization was a very high priority to the high school students' study of Japanese. This finding makes sense because vocabulary building is the major focus at the beginning level of language learning. In contrast, Repetition was much lower on the college students' list of strategies; rather, the emphasis was on strategies that assist in listening (Selective Attention) and speaking (Contextualization) tasks. Selective Attention was important for both levels.

Table 4

Self-Reported Strategy Use of Year 2 High School and College Levels

High School		College	
Strategy	% of students reporting the strategy	Strategy	% of students reporting the strategy
Kinesthetic /Auditory Practice	0.88	Selective Attention	0.93
Selective Attention	0.81	Contextualization	0.86
Repetition	0.81	Grouping	0.86
Associations	0.75	Directed Attention	0.79
Directed Attention	0.69	Prediction	0.71
Imagery	0.63	Imagery	0.71
Grouping	0.50	Personalization	0.57
Questioning	0.50	Repetition	0.43
Cooperation	0.38	Silent Repetition	0.43
Resourcing	0.31	Self Management	0.36
Translation	0.31	Kinesthetic/Auditory Practice	0.36
Practice with others outside of class	0.31	Questioning	0.36
Using nonverbal cues	0.19	Resourcing	0.30
Self Management	0.13	Associations	0.21
Inferencing	0.13	Cooperation	0.21
Note-taking	0.13	Practice with others outside of class	0.21
Prediction	0.06	Inferencing	0.14
Transfer	0.06	Deduction /Induction	0.07

Source: worksheets completed by Year 2 high school and college students (Examples of comments are in Appendix C)

At the end of Year 2, high school students were asked on a worksheet to tell which strategy they would use for their study of Kanji, which was introduced near the end of the second semester. From their responses, it appeared that students did know the names and definitions

of several of the strategies that had been taught. They were able to think of ways to apply the strategies they had learned to the difficult new material confronting them -- Kanji.

Another indication of the students' independent use of strategies was the gains in LSQ scores seen between the pretest and posttest. In Year 2, the comparison between LSQ scores showed that some strategies increased slightly in usage from pre- to posttest. Although at the college level no increases were statistically significant, at the high school level the strategy Monitoring Production (checking one's oral or written production as it is taking place) increased significantly in frequency of use ($t=2.71$, $df=9$, $p=.024$). Monitoring Production was not among the strategies selected to be taught in Year 2 but it was apparently learned through the students' experience over seven months of language study.

Year 3 Data on Independent Use of Language Learning Strategies

Results on independent use of strategies by Year 3 high school students. Strategy use was found to increase across the year as reflected in the overall LSQ posttest ($M = 2.92$, $SD = .62$), which was significantly greater than the LSQ pretest ($M = 2.63$, $SD = .69$, $t_{41} = 2.89$, $p = .006$). Figure 3 shows the differences between the high school students' pretest and posttest LSQ scores on all of the individual strategies. Statistically significant increases are shown in Table 5.

Figure 3. Comparison of Year 3 high school pretest and posttest LSQ scores on individual strategies.

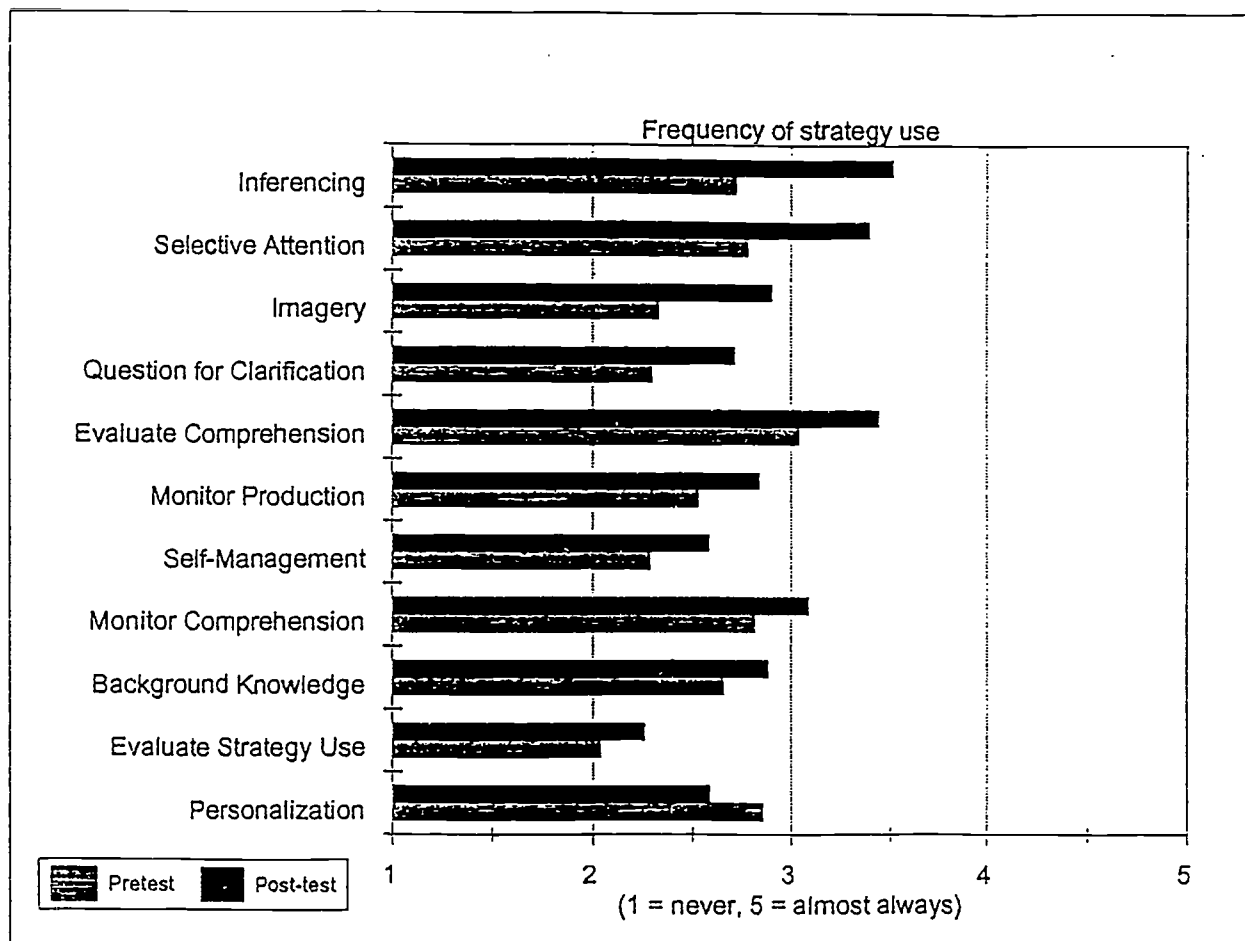


Figure 4. Comparison of Year 3 high school pretest and posttest LSQ scores on strategies categories.

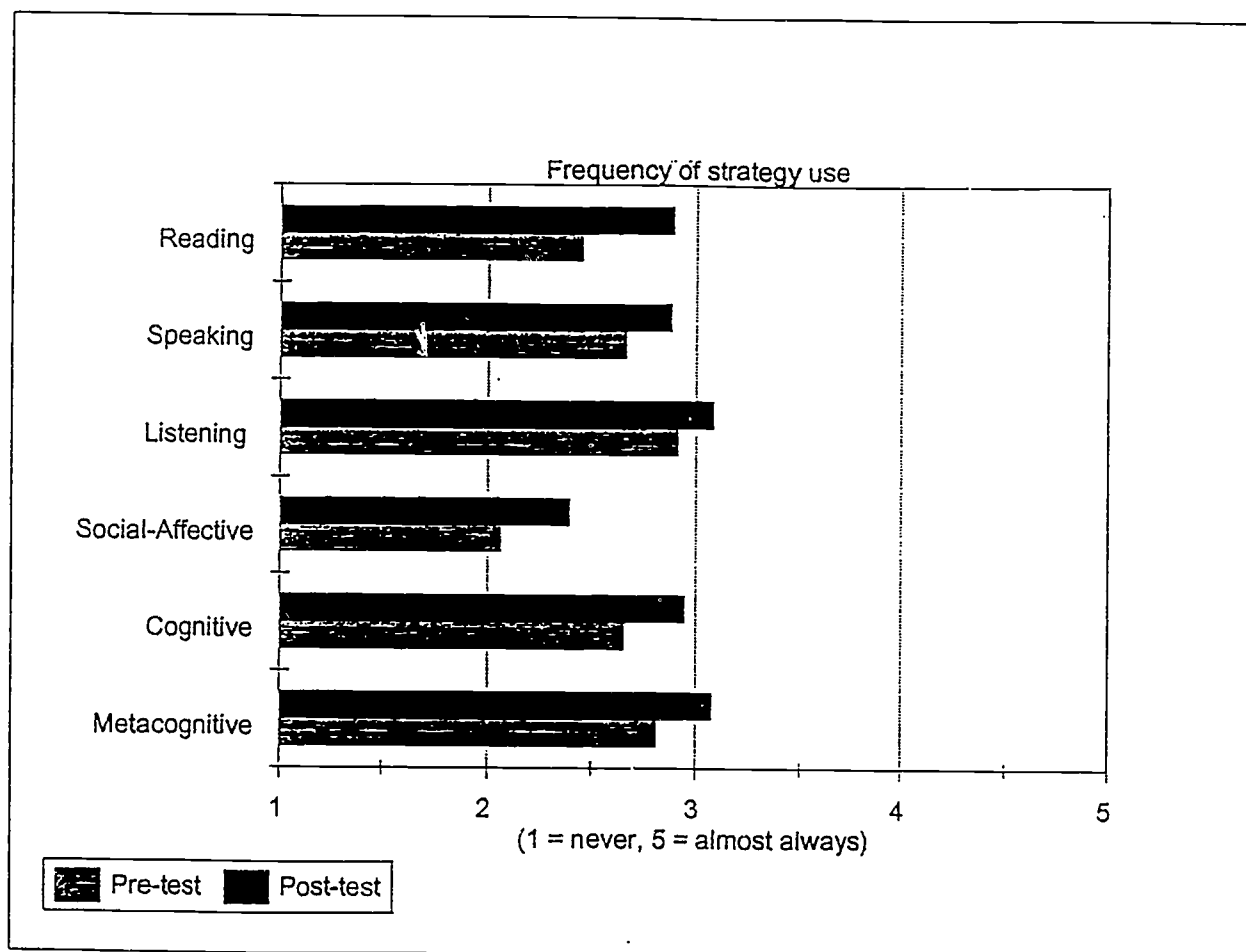


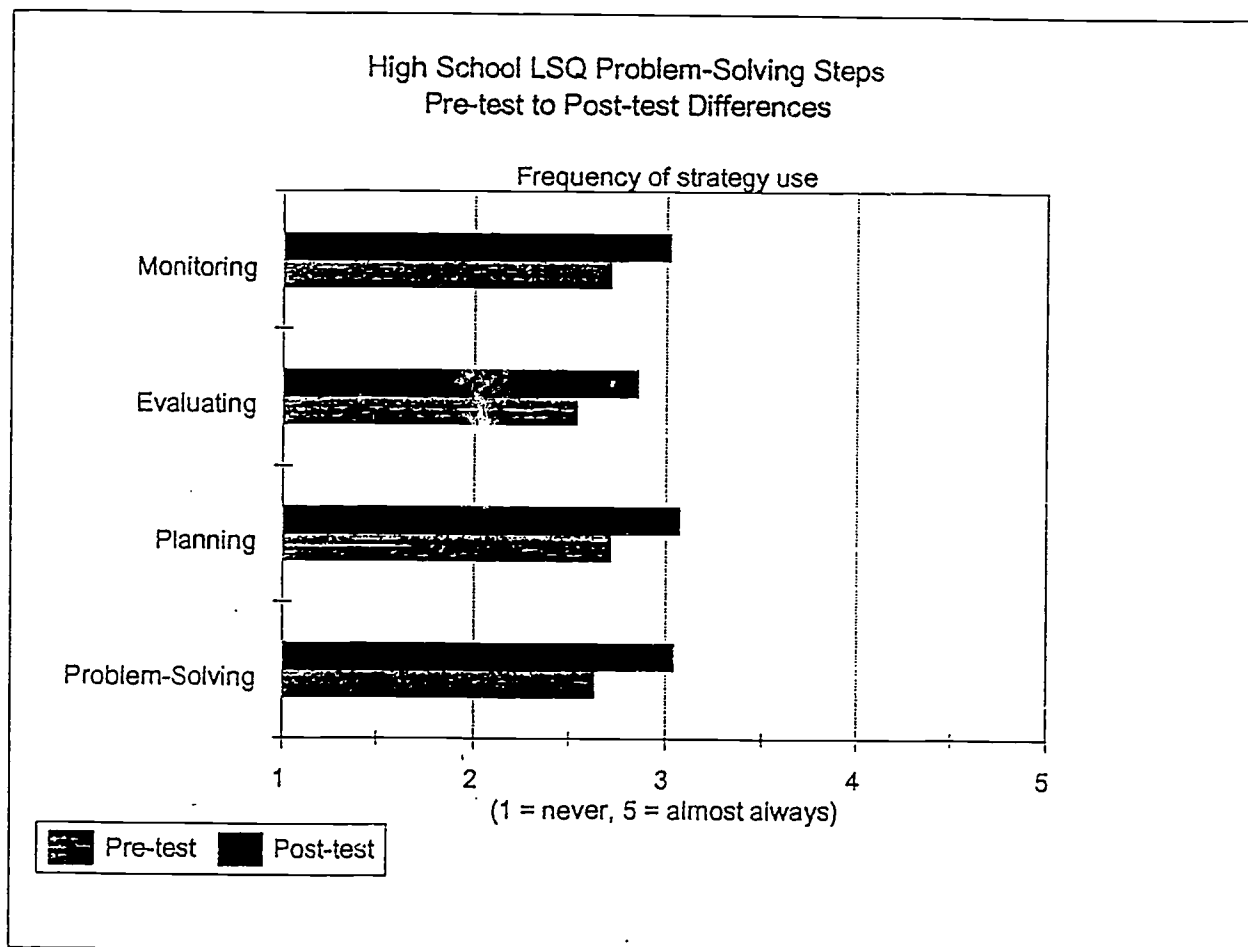
Table 5

Year 3 Significant *t*-Test Results for High School Gains on LSQ

Strategy Group	Strategy Type	<i>M</i> Pr	<i>SD</i> Pr	<i>M</i> Ps	<i>SD</i> Ps	<i>t</i> , <i>df</i> = 41	<i>p</i>
Planning	Mean for all Planning strategies	2.68	1.02	3.14	.81	3.16	.003
Planning	Selective attention	2.79	1.26	3.40	.92	2.98	.005
Monitoring	Mean for all Monitoring strategies	2.63	.88	3.03	.71	2.85	.007
	Monitoring Comprehension	2.68	1.07	3.11	.87	2.44	.019
Problem-Solving	Inferencing	3.07	1.02	3.54	.81	2.99	.005
Evaluating	Evaluating Comprehension	3.08	1.14	3.48	1	2.51	.016

Key: Pr = Pretest, Ps = Posttest

Figure 5. Comparison of Year 3 high school pretest and posttest LSQ scores on Problem-Solving Process Model areas



Results on independent use of strategies by Year 3 college students. Figure 4 shows the increase in strategies use by college students during Year 3. Statistically significant increases were found for Inferencing and strategies for Reading ($M = 2.91$ at pretest; 3.45 at posttest; $SD = .653$ pretest, $.636$ posttest; $t = 2.36$, $p = .050$) The use of strategies as they were presented by the problem-solving process model are shown in Figure 5 for high school and Figure 6 for college students. With the exception of the two increases mentioned above, the increases at the college level were not statistically significant. However, the graph shows them to be fairly consistently increasing, except for two that decreased, Monitoring Production and Self-Management. In contrast, there were four strategies whose means decreased over the year for the control class (see Figure 9).

Figure 6. Comparison of Year 3 college treatment class pretest and posttest LSQ scores on individual strategies.

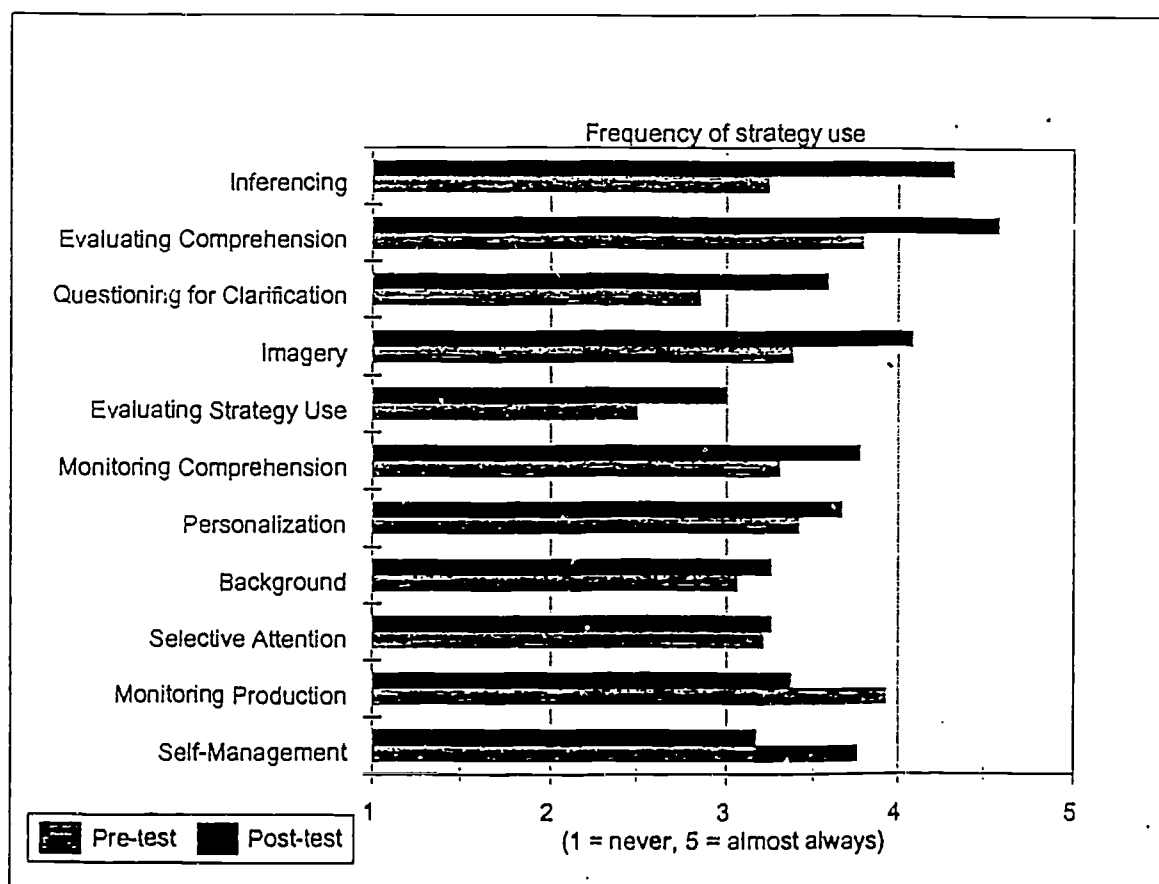


Figure 7. Comparison of Year 3 college treatment class pretest and posttest LSQ scores on Problem-Solving Process Model areas.

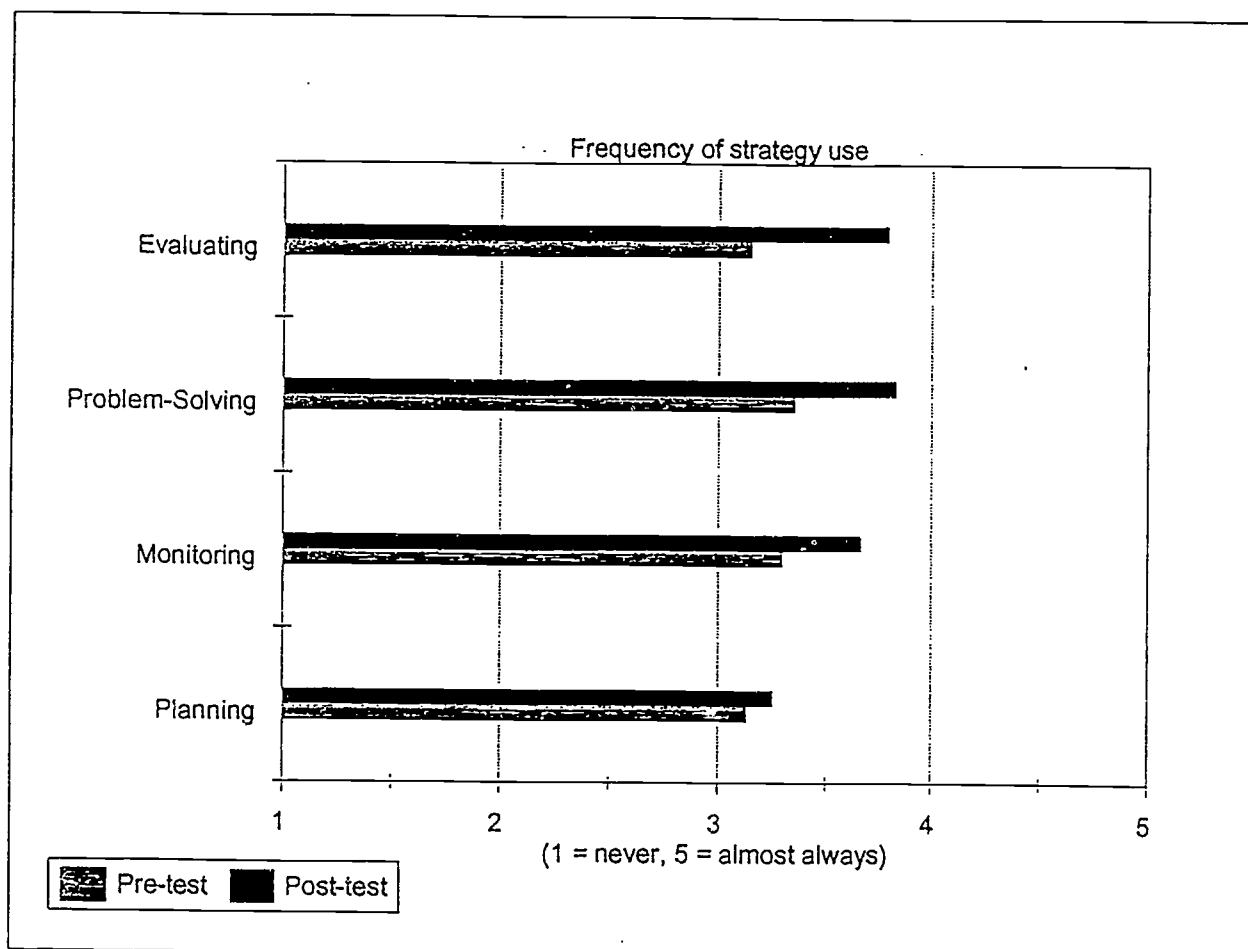


Figure 8. Comparison of Year 3 college treatment class pretest and posttest LSQ scores on strategies categories.

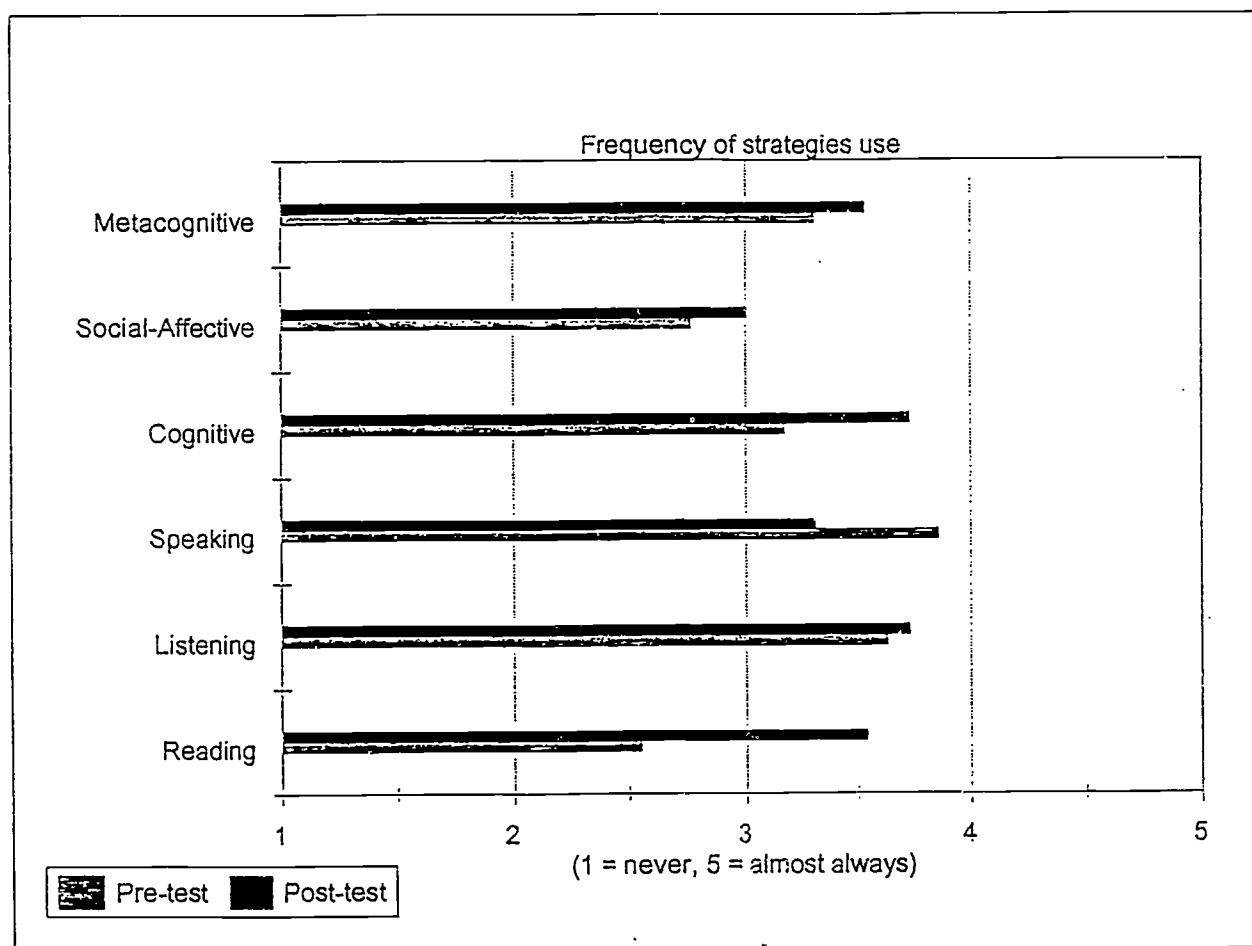
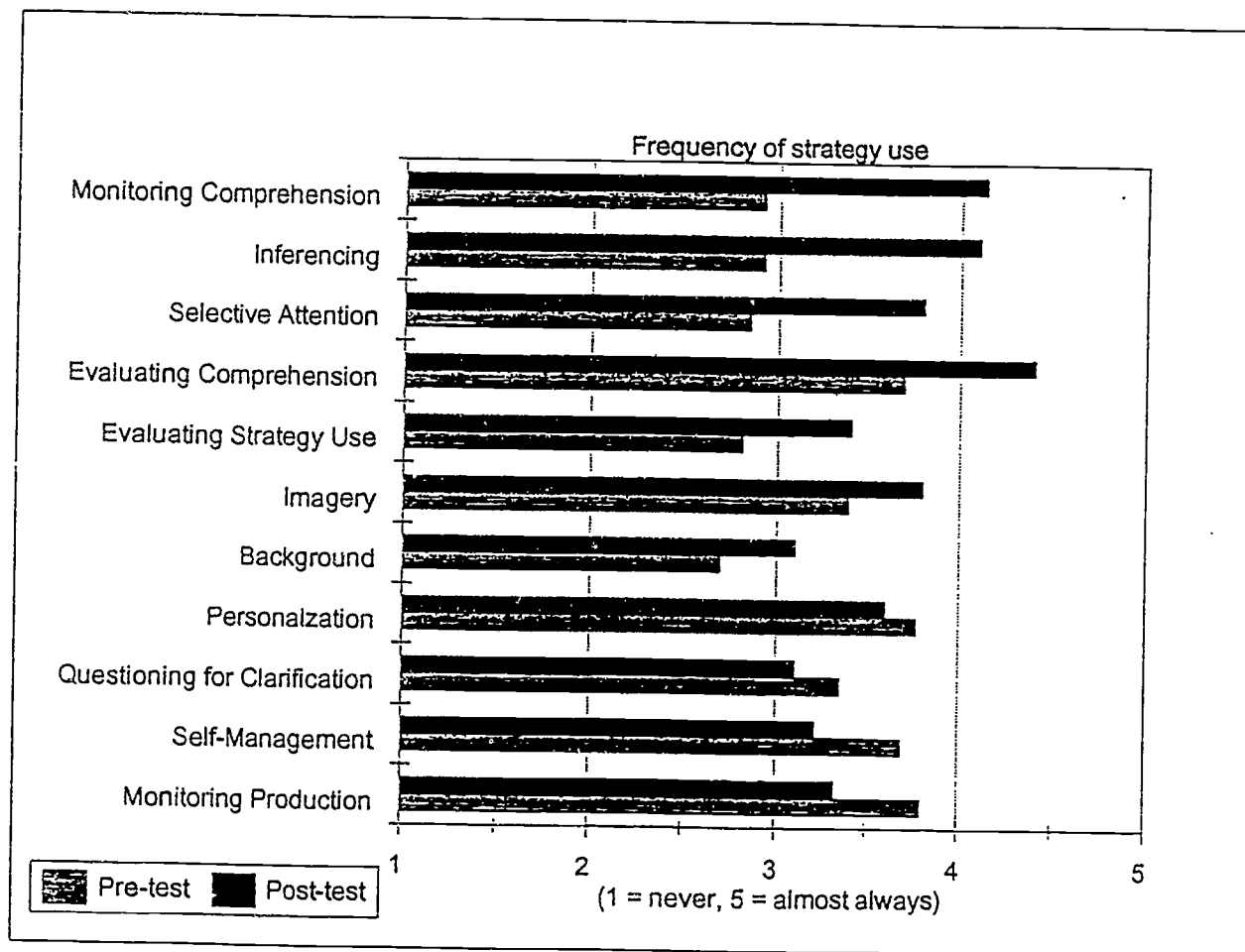


Figure 9. Comparison of Year 3 college control class pretest and posttest LSQ scores on individual strategies.



The framework used to present learning strategies in Year 3 (seen in Figure 1) divided the strategies into four problem-solving steps. Figures 4 and 6 show how frequency of use of these groups of strategies increased between pretest and posttest for the high school and college classes. At the high school level, the largest increase was in the Problem-Solving strategies. Examples of these are: Inferencing, Questioning for Clarification, and Contextualization. The largest increase at the college level was in the group of Evaluating strategies. These include Monitoring Production and Monitoring Comprehension.

Because Year 3 worksheets elicited a low level of student response, the midyear questionnaire was used to assess the needs of the college students and problems they encountered in learning Japanese. The results of this questionnaire were used to tailor the focus of the learning strategies instruction presented in the second semester of Year 3 to better meet the students' needs. Students used a five-point Likert-type scale to indicate how often they had problems in specific areas of learning Japanese; response options ranged from *never* to *always*. The first part of the Midyear Questionnaire dealt with problems in speaking and listening, and the other part dealt with problems in reading and general learning activities for Japanese. The problems reported by students are reported in Table 6.

Table 6

Problem Statements on the Midyear Questionnaire in Year 3

Task:	Statement and mean score:		
Speaking	I try to translate from English directly into Japanese. (3.5)	I forget the words in Japanese when I speak. (2.9)	I feel very nervous when I speak Japanese, so I can't enjoy it. (2.7)
Listening	I recognize the sound of words but I don't understand what they mean. (2.7)	I don't understand what the teacher says in class. (2.5)	I don't understand what the other students say in class. (2.3)
Reading	I have to write Romaji above sentences that are written in Japanese characters. (2.5)	I cannot separate words from each other when I'm reading. (2.5)	I feel very nervous when I speak Japanese, so I can't enjoy it. (2)
General	I feel unprepared when I am called on for a drill. (2.12)	I can't see the connection between the lesson objectives and the activities that I am engaged in. (1.65)	It's hard for me to study with classmates or friends outside of class. (1.28)

Key: rating of the frequency the problems were encountered was on this scale: 1 = never, 2 = rarely, 3 = sometimes, 4 = usually, and 5 = always. Means are for the class.

After identifying their problems, students were asked to discuss ways to overcome these problems. Among their comments were:

I write Hiragana sentences or words in Katakana until I can learn the Hiragana.

It would be easier for me if the vocabulary we learned were more categorized and we learned it in the context of grammar constructions (more so than now).

I think that the current book makes integrating Kana and Romaji more difficult than it should be. This has not hindered me terribly but I feel that we should be learning the way Japanese people do.

I write words when we learn them so I remember what they look like, sound like, and mean.

These comments were addressed in the strategies instruction that followed. For example, the student who made the second comment above could use the strategies Contextualization and Grouping to make the vocabulary easier to remember. Worksheets that followed in the second semester of Year 3 dealt with the problems that the responses on the Midyear Questionnaire revealed. For example, Worksheet 10 described how students could use Contextualization to help them remember the Japanese phrases of the textbook's core conversations in a realistic situation. Worksheet 11 presented strategies for improving listening comprehension, and Worksheet 12 gave students the opportunity to practice Grouping with the set of family names (mother, father, brother, etc.).

Continuation of Language Learning Strategies Use

Follow-up questionnaires were distributed to both college and high school students continuing into Level Two Japanese during Year 3 of the study. The college students returned an insufficient number of the follow-up questionnaires for data analysis. However, the high school students who had participated in Year 2 did return the follow-up questionnaires (the LSQ)

during their second semester of Level Two Japanese. A t-test was performed comparing the scores on the high school students' Year 2 posttests (LSQ) with the follow-up measures given in Year 3. The t-tests showed no significant difference in the scores. These results indicate that the students' level of strategy use remained constant for a year following the learning strategies instruction.

Influence of Language Learning Strategies Instruction on Students

Research Question 4 :

- Do students who use the learning strategies (a) show greater gains in language proficiency and (b) perceive themselves as more effective learners than students who do not use the strategies?

This section addresses the two elements of the above question; (a) the relationship between language learning strategies use and proficiency, and (b) the relationship between language learning strategies use and self-efficacy, an aspect of the affective and motivational dimension of language learning. As described earlier, self-efficacy refers to the students' perceptions of their ability to perform a learning task, in this case, learning to speak, read, write, and listen to Japanese.

Language Learning Strategies Use and Proficiency

Students' use of language learning strategies as reflected on LSQs and mid-year questionnaires were compared to their level of proficiency as reflected in the Test of Language (TL) and teacher ranking (RK). The scores on the TL of the Year 3 college class were found to correlate with teacher ranking ($r = .516, p = .017$), supporting the use of RK as a measure of proficiency. In the following discussion, all results are from posttests, unless otherwise specified.

Results on strategies use and proficiency of Year 2 high school students. The correlational analysis performed with Year 2 high school Test of Language (TL) and Learning Strategies Questionnaire (LSQ) scores indicated that the relationship between the total score on the TL and the total score on the LSQ was not significant at $p < .05$. However, the reading section of the TL did correlate with the total LSQ ($r = .598, p = .026$). In addition, the listening section of the TL correlated with the reported use of vocabulary strategies on the LSQ ($r = .697, p = .009$).

Teachers ranked students' abilities across all language skills for a global ranking, which was used as one of the study's proficiency measures. A correlation of teacher ranking (RK) of high school students and overall LSQ scores showed no significant results at $p < .05$. When strategies were classified into categories, however, teacher ranking correlated with use of cognitive ($r = .471, p = .033$) and social-affective ($r = .435, p = .046$) strategies, but not with metacognitive strategies. Although the differences found when comparing proficiency groups were not statistically significant with the small sample, some patterns emerged. At the high school level, the high proficiency group reported more frequent use of strategies overall (frequency of 3.29 on a scale of 1 = *never* to 5 = *always*) than the low proficiency group (frequency of 2.61).

Results on strategies use and proficiency of Year 2 college students. For the college class, correlational analyses of the means of the overall LSQ and its subparts with the overall TL and its subsections showed a moderate correlation between the reported use of vocabulary strategies on the LSQ and the overall score for the TL ($r = .549, p = .026$). A moderate correlation was also found between the reading proficiency section of the TL and reported use of vocabulary

strategies on the LSQ ($r = .585, p = .018$). The overall LSQ, however, was not significantly correlated with the overall TL.

Correlational analyses were done on the teacher's ranking (RK) of students with their LSQ scores. A moderate correlation was found between RK and overall LSQ ($r = .502, p = .028$). RK also correlated with reported use of metacognitive strategies on the LSQ ($r = .688, p = .003$). A t-test showed that the high proficiency group used metacognitive strategies more frequently than the low proficiency group ($t_s = 3.27, p = .011$)

Results on strategies use and proficiency of Year 3 high school students. The planned quasi-experimental design for the high school level was not carried out due to the availability of only one teacher of Japanese who would participate in the study. This teacher taught two classes, but the classes were not comparable due to social, cultural, and economic reasons. Therefore, the teacher presented strategy instruction to both of the classes.

Correlational analyses performed on the Year 3 high school LSQ with TL and RK showed a significant relationship between RK and the sections of the LSQ that reflect frequency of use of Problem-Solving strategies. This correlation means that students who reported using Problem-Solving strategies (i.e., Questioning for Clarification, Inferencing, Contextualization, and Cooperation) more frequently were also ranked higher by their teachers at the end of the year. Correlations between the LSQ and TL were not significant, nor was the overall correlation between LSQ and RK.

Results on strategies use and proficiency of Year 3 college students. At the college level, two level 1 Japanese sections were assigned to the treatment and control groups. The measures developed during the first two years of the study were administered to both groups.

Because classes were not randomly assigned to the treatment and control groups, Analyses of Covariance (ANCOVAs) were used to analyze posttest differences in LSQ, SEQ, and TL, considering where students started out at pretest. None of these ANCOVAs were statistically significant. One problem in finding differences between the two groups was the small number of students completing both the pretest and posttest on each measure; this was largely due to the fact that the college assigns students to sections on a semester basis, whereas the study spanned the academic year.

Language Learning Strategies Use and Self-Efficacy

This section addresses the second part of research question 4:

- Do students who use language learning strategies perceive themselves as more effective learners?

The findings of this study indicate that all of the students used at least some learning strategies. Therefore, the researchers looked at reported frequency of strategies use and its relationship with self-efficacy. The results also showed increases in self-efficacy as reflected in gains from pretest to posttest on the Self-Efficacy Questionnaire (SEQ) for some of the classes.

Students' scores on the Self-Efficacy Questionnaire (SEQ) were compared to their Learning Strategies Questionnaire (LSQ) scores. The SEQ asked students to rate their confidence in their ability to perform specific language learning tasks, such as memorizing a list of Kanji, reading and pronouncing a dialogue, and so on. Some interesting patterns emerged at both high school and college levels.

Results on strategies use and self-efficacy of Year 2 high school students. At the high school level, there was an overall relationship between strategy use and self-efficacy ($r = .691$,

$p = .013$). Table 7 shows the correlations between the SEQ and LSQ including their subsections for the high school class. Most of these correlations were significant. Moreover, there were clear patterns in the correlations that were not statistically significant. For example, the use of strategies for listening did not correlate with self-efficacy.

Table 7

Year 2 High School SEQ & LSQ Posttest Correlations

n = 10	SEQ Avg.	Hir. & Kat. Voc.	Kan. Voc.	Hir. & Kat. Dia.	Hir. & Kat. Rdg.	Soc. Sit.
LSQ AVG	$r = .691$ $p = .013$.691 .013	.009 .490	.736 .008	.773 .004	.651 .021
Task 1: Vocabulary	.591 .036	.757 .006	-.245 .247	.733 .008	.775 .004	.545 .051
Task 2: Listening	.475 .083	.361 .152	.298 .201	.366 .149	.366 .149	.435 .104
Task 3: Speaking in Class	.642 .023	.536 .055	.106 .385	.653 .020	.692 .013	.624 .027

Key: Voc. = Vocabulary; Dia. = Dialogue; Rdg. = Reading; Rom. = Romaji; Hir. = Hiragana; Kat. = Katakana; Kan. = Kanji; Soc. Sit. = Social Situation

Note: Significant correlations are in bold type; r coefficients are on first lines and p values are on second lines.

A t-test comparing the SEQ scores of the Year 2 high school class at pretest and posttest found a significant increase (pretest $M = 5.36$, $SD = .153$; posttest $M = 6.73$, $SD = 1.33$; $t_{13} = 2.86$, $p = .013$).

Results on strategies use and self-efficacy of Year 2 college students. Table 8 shows that the overall average for the SEQ correlated with the frequency of using strategies reported on the LSQ sections on Listening and Speaking. The separate sections of the SEQ dealing with several

individual tasks also correlated with the LSQ. The section of the SEQ on learning Hiragana and Katakana vocabulary correlated with the use of strategies for Listening. The SEQ section on learning Kanji vocabulary correlated with the overall LSQ average, the LSQ Listening section and the LSQ Speaking section. The SEQ section on learning Hiragana, Katakana and Kanji dialogues correlated with the overall LSQ average, and the LSQ Listening and Speaking sections.

Table 8

Year 2 College SEQ and LSQ Posttest Correlations

N= 15	SEQ Avg.	Rom. Voc.	Hir & Kat Voc.	Kan Voc.	Rom. Dia.	Hir. Kat. & Kan. Dia.	Hir & Kat Rdg.	Soc. Sit.
LSQ Avg.	$r = .436$ $p = .052$.428 .056	.226 .208	.500 .029	.408 .065	.536 .020	.223 .212	.239 .195
Task 1: Vocab. Learning	-.110 .348	.158 .286	-.426 .056	.0009 .499	.057 .420	.078 .390	-.268 .167	.007 .489
Task 2: Listening	.460 .042	.132 .319	.461 .042	.443 .049	.388 .076	.442 .049	.421 .059	.235 .199
Task 3: Speaking in Class	.473 .037	.397 .071	.312 .129	.495 .030	.380 .081	.639 .005	.290 .147	.199 .237

Key: Voc. = Vocabulary; Dia. = Dialogue; Rdg. = Reading; Rom. = Romaji; Hir. = Hiragana; Kat. = Katakana; Kan. = Kanji; Soc. Sit. = Social Situation

Note: Significant correlations are in bold type. r coefficients are on first lines and p values are on second lines.

Table 9

Year 3 High School SEQ & LSQ Posttest Correlations

	SEQ Avg.	Kanji Vocab.	Dia. Hir.	Rdg. Kana	Soc Sit.
LSQ Avg.	$r=.328$ ($n=45$) $p=.01$ 4				
Reading		.2877 ($n=41$) .034		.2624 ($n=41$) .049	
Listening					.2758 ($n=38$) .047
Planning		.333 ($n=38$) .020	.3332 ($n=35$) .025		
Activating Background Knowledge		.3804 ($n=35$) .009			
Questioning for Clarification		.3896 ($n=39$) .007			
Evaluating Comprehension	.2857 ($n=42$) .033	.3155 ($n=39$) .025			
Problem-Solving		.3013 ($n=38$) .033			

Key: Voc. = Vocabulary; Dia. = Dialogue; Rdg. = Reading; Rom. = Romaji; Hir. = Hiragana; Kat. = Katakana; Kan. = Kanji; Soc. Sit. = Social Situation. r coefficients are on first lines and p values are on third lines.

Note: Because of the large number of subcategories derived from the Year 3 LSQ, a selection of the full matrix is provided here, showing the significant correlations.

A t-test comparing the SEQ scores of the Year 2 college class at pretest and posttest did not find a significant increase ($M = 7.43$ at pretest; 7.33 at posttest)

Results on strategies use and self-efficacy of Year 3 high school students. In Year 3 the high school students showed a significant increase in SEQ scores from pretest to posttest in their SEQ scores (pretest $M = 3.19$, $SD = 1.56$; posttest $M = 4.58$, $SD = 1.77$; $t_{42} = 4.64$, $p = .000$), indicating higher self-confidence in language learning ability. At the high school level, some correlations were found between SEQ and LSQ subsections (see Table 9). The overall scores for the LSQ and the SEQ had a low but significant correlation; this indicates that students who used strategies more frequently tended to give a higher self-rating on their language learning capability. The subsection relating to Listening on the LSQ correlated with the SEQ section on a Social Situation for the high school class in Year 3 (see Table 9).

Results on strategies use and self-efficacy of Year 3 college students. As mentioned above, the two college level classes in Year 3 were part of a quasi-experimental study. A t-test performed on the two groups' scores on the SEQ pretest showed the treatment group having significantly higher self-ratings of language learning capability than the control class (treatment class $M = 6.42$, $SD = 2.06$; control class $M = 4.18$, $SD = 1.26$; $t = 3.59$, $p = .001$). Because of this initial difference an Analysis of Covariance was used to compare the SEQ posttests, which were not significantly different for the treatment and control groups. When analyzing relationships between the SEQ and LSQ subsections, the only significant correlation was between the SEQ Posttest Reading section and the LSQ Posttest Speaking section ($r = .623$, $p = .020$). Again, the small number of college students completing measures made it difficult to find significant differences.

Discussion

The preceding results section was divided not only by research questions, but also by project year and school level. The following discussion is organized to summarize and interpret findings for each research question.

Strategies Selected by Japanese Instructors as Most Beneficial to Their Students

The first research question in these studies was aimed at identifying strategies that Japanese instructors would find most beneficial to their students. Although strategies had been taught in other languages, little research had been done in Japanese. Because of the unique characteristics of Japanese relative to more commonly taught languages (e.g., more than one writing system), it was not clear what strategies would be most helpful to students first learning Japanese. The Japanese teachers in these studies helped select strategies that they thought would be appropriate for their goals and their students. They also evaluated the strategies' relative usefulness after they had implemented strategies instruction.

Factors affecting teachers' perceptions of strategies' appropriateness. Based on the researchers' interactions with teachers through both planning and interviews, it became clear that several factors played a role in teacher's views of strategies' appropriateness. The most salient factors involved the various emphases of the curricula used across participating classrooms. For example, the organization of the curriculum around thematic units or structural features (e.g., grammatical rules) seemed to affect teachers' decisions about appropriate strategies. For curricula emphasizing structural features of the language, memorization strategies seemed more important, whereas production and monitoring strategies seemed more important in proficiency-based curricula. Similarly, different strategies were perceived as appropriate for the four

language tasks--speaking, listening, reading, and writing. The emphasis on vocabulary memorization also seemed to affect teachers' choice of appropriate strategies.

Another important curricular factor to consider in Japanese instruction is the sequencing of and relative emphasis on the various written forms. It seems plausible that study in the westernized Romaji writing system would require different strategies than study in Katakana, Hiragana, or Kanji.

The level of language instruction (e.g., beginning vs. intermediate) also represents curricular differences that could affect which strategies would be most appropriate. For example, beginning levels often emphasize more vocabulary acquisition, whereas intermediate levels emphasize more language production. It is likely that the strategies that are appropriate depend on the level of the task.

Closely related to the level of language proficiency, student maturity may have an impact on teacher's selection of appropriate strategies. In these studies, for example, the teacher of younger high school students emphasized concrete applications of strategies, especially contextualization strategies that focused on physical activity and use of concrete objects. In contrast, teachers of older college students emphasized more metacognitive strategies, such as those involving personal reflection and concentration.

Finally, one teacher pointed out that her strategies decisions depended on individual learning differences among her students. This teacher tried to tailor strategies selection to students' needs, staying aware of students' learning strengths and weaknesses.

Specific strategies teachers selected as most helpful. The teachers identified a few strategies that they found the most powerful in their classrooms. In discussing strategies'

usefulness, teachers often tied the strategy to a learning task for which the strategy was appropriate. For example, the teachers found the Prediction and Selective Attention strategies useful for listening tasks. Selective attention also was useful for learning important grammatical constructions. Teachers perceived Contextualization strategies, including acting out and using props, as important for memorizing vocabulary or sample dialogues. Although these strategies were selected as the most appropriate, all teachers seemed to support the value of a repertoire of strategies to support a variety of language tasks and to reach students with diverse learning needs.

Approaches to Learning Strategies Instruction for Students of Japanese

The second research question in these studies asked, "How can learning strategies be taught to high school and college students of Japanese?" Perhaps the greatest success of this program of research was the development of resource guides for Japanese strategies instruction that were acceptable to teachers and students. Before the development of strategies instruction for Japanese through this study, it was not even known whether strategies could be taught as part of Japanese instruction. The following paragraphs summarize this study's approach to developing strategies instruction that was satisfactory to a group of cognitive researchers, language researchers, teachers, and students.

Collaborative researcher/practitioner effort. One of the most critical features of the language learning strategies instruction developed in this study was the collaborative input of researchers and teachers. The researchers relied on cognitive research and language learning research as a foundation for the strategies instruction. The teachers provided extensive feedback

guiding the original development of strategies instruction. They also provided ongoing formative feedback throughout the study.

The instructional approach developed over time. Throughout the study, the strategies instruction emphasized explanations, modeling, and practice of strategies. The instruction also emphasized teaching strategies in the context of important language learning tasks. The goal was to integrate the process of strategies with the content of the regular curriculum. Another change in the instruction was the focus on a more manageable and coherent repertoire of strategies that are applicable across a range of tasks. This need led to the researchers' development of the Problem-solving Process Model of Comprehension, in which target strategies were imbedded (see Figure 1). As the need for more concrete explanations for strategies became clear, the researchers developed the analogy of a mountain climber to explain the steps of the problem-solving process. Moreover, the researchers continually strived to find authentic tasks in which to imbed strategies instruction.

The result of these collaborative efforts between researchers and teachers was a set of resource guides for teaching learning strategies in Japanese classrooms. The participating teachers responded positively to the usefulness of the resource guide lessons in their classrooms.

Teacher implementation of resource guide lessons. Through classroom observations, the researchers studied teachers' implementation of the strategies instruction. In Year 2, teachers often had insufficient time to put scripted lessons into their own words. This sometime resulted in artificial lessons that sounded like add-ons to the curriculum. In response to this problem, Year 3 instruction included more written explanations on student worksheets, with less scripted text for teachers.

Teachers modified some cooperative activities so that it was easier to monitor student practice. This seemed especially important in high school classes, where students would often use English, rather than Japanese, to complete activities if they were not monitored. Teachers' adaptations often included games and other classroom activities for practicing strategies. Teachers' particular adaptations, as well as their responses during interviews, highlighted several issues in Japanese strategies instruction that deserve further attention. These issues are discussed in the Conclusions chapter.

Design Limitations of the Study

Because much of the remaining discussion is based on the results of statistical analyses, it is important to note some caveats of the current study. Perhaps most critically, the infeasibility of randomly assigning teachers to treatment conditions (due to the small number of Japanese classrooms available to participate) made it impossible to draw causal implications about the impact of strategies instruction. Even in the quasi-experimental design in Year 3 college classes, the control and treatment classes were not equivalent on the measures at the outset of the study. Moreover, control and treatment teachers had been exposed to similar methods of language instruction, which included information about learning strategies. Another challenge to the study was the small number of students enrolled in the Japanese classes, compounded by the fact that even fewer students completed all measures. For these reasons, statistical power was often too low to detect significant correlations or significant differences among means. We report these caveats not only because of their importance in the interpretations of these data, but also to alert other researchers to these potential challenges.

Students' Independent Use of Language Learning Strategies

The students in this study reported using language learning strategies, even before receiving strategies instruction. Open-ended questionnaires revealed a variety of strategies across students. They also revealed that individual students differed in their preferred strategies. Among the most frequently reported strategies were selective attention (at both high school and college levels), contextualization (both levels), repetition (high school), and grouping. Although college students frequently reported the use of predictions, high school students rarely reported this strategy. In contrast, high school students often reported use of associations, but college students did not. Neither high school nor college students reported much use of inferencing, a potentially powerful strategy, during language tasks.

The strategies that students reported independently in open-ended questionnaires and interviews mainly fell under the category of cognitive strategies. These strategies reflected an approach that was more focused on accomplishing specific learning tasks, like memorizing and immediate understanding. One important feature of the student population was the wide variety of native languages and experience in learning foreign languages. One result of their experience was that some students rejected the instruction given in learning strategies, saying that they had their own techniques for language study.

One of the research questions in the study asked whether students instructed in learning strategies apply the strategies independently. The findings on this question, based on pre-to-post comparisons of students' Learning Strategies Questionnaires (LSQs), were mixed. In Year 2, the gains for instructed strategies between pretest and posttest were not statistically significant. In Year 3, the high school class did make significant gains in overall reported frequency of

strategies use. The use of several individual strategies also increased significantly. At the college level, some individual strategies increased significantly in reported use, although the overall LSQs were unchanged. Because students' self-reported frequency of strategies use was moderate at both pretest and posttest, there was still much room for growth in students' strategies use.

Although pretest to posttest gains cannot be attributed directly to strategies instruction, the fact that even pretest-to-posttest results were mixed suggests the need for further refinements if strategies instruction is to impact students' use of strategies. Nonetheless, the fact that more pre-to-post gains were found in the third year of the study than in the second year may suggest that the modifications in the strategies instruction were moving in a positive direction.

Another indication of the influence of the learning strategies instruction was the students' awareness of their learning processes. By the end of each school year, students were able to identify and define the instructed learning strategies. They were also able to suggest additional applications of these strategies.

Applications of strategies in subsequent levels of study. Because the study of gains in strategy use at the end of a year of strategies instruction were inconclusive, it is misleading to discuss "maintenance" of strategies except to say that students neither increased nor decreased their reported frequency of strategies use after a year of language study following their year of strategies instruction. Clearly, further research is needed in this area.

Relationship between Learning Strategies Use and Language Proficiency

Based on these studies, there is no conclusive evidence regarding the relationship between reported strategies use and language proficiency. The Learning Strategies Questionnaire (LSQ)

was correlated with two measures of language proficiency, a Test of Language (TL), and a Teacher Ranking (RK) of students as "high, medium, or low" proficiency. Between the LSQ and TL, the overall correlation was not significant for high school or college classes in either year. Although some subsections of the LSQ were correlated with subsections of the TL, no clear patterns emerged across years and levels.

One potentially important correlation at the Year 2 high school level was between the listening section on the Test of Language and the LSQ section on vocabulary strategies. This led the researchers to question whether the listening section on the Test of Language was actually more a test of vocabulary. On examination, the listening test contained items that could be answered correctly through knowledge of vocabulary. Thus it is possible that the section did not separate listening skills from vocabulary knowledge.

The correlation between LSQ and Teacher Ranking (RK) was significant only for the Year 2 college class. Although some subsections of the LSQ were significantly correlated with RK, the subsections varied across years and levels.

Relationship between Learning Strategies Use and Self-Efficacy

The LSQ measure of strategies and the SEQ measure of self-efficacy were studied in correlational analyses. The overall correlation between LSQ and SEQ was significant for high school classes in both the second and third years of the study. In contrast, the overall correlation was not significant for college classes in either year. The greater number of students participating at the high school level provided greater statistical power for identifying correlations than at the college level.

At the high school level in both Years 2 and 3, there also were pretest to posttest gains in students' self-efficacy measures. These findings indicate that over the year, students realized that they were capable of successfully learning Japanese. Whether these gains are attributable to learning strategies instruction cannot be determined without experimental data.

In contrast to these high school students, the college students in Years 2 and 3 did not increase their self-rating of confidence on the SEQ between the pretest and posttest. One possible interpretation of this finding is that the college students began the year with unrealistic expectations, but when faced with the enormity of the task of learning as difficult a language as Japanese, develop a more limited view of their learning capabilities by the end of the year.

At each year and level, there were patterns in the subsections of the SEQ and LSQ correlations. For example, at the college level in Year 2, the individual SEQ tasks that were not significantly correlated with LSQ (see Table 8) were relatively easy; they probably did not require the college students to frequently employ learning strategies. Those SEQ tasks that were significantly correlated with LSQ were more challenging ones: reading and memorizing Kanji vocabulary, and reading dialogues written in Kana. These tasks would be easier for students with a strong repertoire of learning strategies. Correlations between listening and speaking LSQ scores and the average of SEQ scores reflect on the emphasis of the college Japanese curriculum: Speaking and listening are of fundamental importance. Thus, it makes sense that those college students who had developed a set of effective strategies for listening and speaking would have the most self-confidence in language learning in this situation. These correlations between the listening and speaking sections of the LSQ and the SEQ also represent a change over the seven months of the study: Only two correlations showed up between the LSQ and SEQ pretests; those

were on Romaji Vocabulary learning, and Kanji vocabulary. This is evidence for the value of learning strategies training that is integrated with a particular curriculum: If learners are given the strategies they need to meet the specific demands of their program, they will feel more confident about their language learning ability.

The small number of Year 3 college students completing both the LSQ and SEQ made it difficult to assess relationships. The only significant correlation for this group was between SEQ reading and LSQ speaking. Unlike patterns in the other groups, there were no clear meaningful interpretations of this result.

In the Year 2 high school group, most correlations were significant, and there were clear patterns in the correlations that were not significant. Specifically, the use of listening strategies did not correlate with self-efficacy on any task. A possible reason for this finding is that high school students were not required to listen to tapes and received less emphasis on conversation skills. Another pattern for Year 2 high school students was that self-efficacy ratings on Kanji vocabulary was unrelated to all aspects of learning strategies use. At the high school level, Kanji was not taught until the end of the year. Thus, the students had no experience in learning Kanji when they took the posttest LSQ.

In contrast, for Year 3 high school students, self-efficacy in Kanji vocabulary was correlated with several subsections on the LSQ. These students were studying a different curriculum that emphasized Kanji from early in the year.

Summary

The study did not provide conclusive evidence regarding the relationship of strategies use with language proficiency or self-efficacy. Although there were some indications of these

relationships, the data were not consistent across levels and years. More positively, the instructional development aspects of the study provided several important insights regarding language strategies instruction. For example, it became clear that strategies instruction needs to be integrated with the specific Japanese curriculum and that different curricula and developmental levels require different strategies. The following chapter highlights what was learned about designing language learning strategies instruction during this three-year research program.

Chapter IV: Conclusion

In the first part of this chapter we provide a summary of the three-year study conducted by Georgetown University, **Learning Strategies in Japanese Foreign Language Instruction**. This is followed by a discussion of the study's major accomplishments and information about the dissemination activities undertaken as part of the study. The next section explores emerging issues in strategies instruction for Japanese, and the chapter concludes with suggestions for future research needs on learning strategies for Japanese.

Summary of the Study

The study's objectives, subjects, instructional context, instruments, and yearly activities are described briefly in this section. More detailed information on research questions, methodology, and results is provided in Chapters I, II, and III of this report.

Objectives

The main objective of the study was to find out whether learning strategies instruction could be applied to beginning level Japanese study. Previous research on teaching language learning strategies, focused on English as a foreign or second language (Brown & Perry, 1991; Chamot et al., 1993; O'Malley et al., 1985b; Rost & Ross, 1991), French (Hosenfeld et al., 1981), Spanish (Rubin et al., 1988), and learning in first language contexts (e.g., Pressley & Associates, 1990). The current study, however, has been the first to investigate learning strategies in Japanese as a foreign language. Questions addressed included which strategies would be most appropriate for high school and college classes, how the strategies could be implemented within the curriculum, and what effects the strategies instruction has on students.

Subjects and Instructional Context

The study was conducted in a mid-Atlantic metropolitan area with high school and college native-speaking Japanese teachers and their students. Three high school teachers and four college instructors collaborated in implementing the study. Over three year, a total of 93 high school beginning level students and 50 intensive beginning level college students participated in the study. The majority of the students were native speakers of English, but other students had Asian language backgrounds (e.g., Chinese, Khmer, Korean, Vietnamese, Thai), and a few students came from other language backgrounds (e.g., Italian, Russian, Ukrainian). Of the college students completing a background questionnaire, about half indicated that they had already studied another foreign language besides Japanese or English. About 80% of the high school students providing background information indicated that they had studied a foreign language besides English or Japanese. The college and high school programs were characterized by differences in instructional approach. High school students were introduced to the Japanese writing system from the beginning of the first year course, whereas college students began with oral skills and were introduced to writing later. One high school class used a textbook, whereas the other high school classes followed a proficiency-based curriculum developed by the teacher.

Instruments

Instruments were developed to collect data from both students and teachers. Questionnaires administered to students included: a *Background Questionnaire* to gain information about students' age, gender, native language, and previous language study; a *Learning Strategies Questionnaire (LSQ)* designed to elicit the frequency with which students used strategies for the types of language tasks they encountered in their class; a *Self-Efficacy*

Questionnaire (SEQ) which asked students to rate their degree of self-confidence for accomplishing different learning tasks in Japanese; and open-ended questionnaires administered to students at the mid-year point to explore the degree to which they found the strategies instruction useful. Information about students' language proficiency and achievement was collected through criterion-referenced *Tests of Language (TL)* for both high school and college groups, and a *Teacher Ranking Scale (RK)* in which teachers used criteria developed jointly by teachers and researchers to rank their students.

Classroom observations were recorded on an *Observation Summary Form*, and teachers' attitudes and recommendations about the learning strategies instruction were elicited through structured interviews guided by a *Teacher Interview Guide* (Appendix A-6).

Yearly Activities

The design of the study called for development activities during the first year, followed by implementation of strategies instruction in high school and college beginning level Japanese classrooms in the second and third years. This design was carried out with minor modifications related to the availability of high school Japanese teachers.

Activities in Year 1 (1990-1991) focused on securing teacher and school district collaboration, observing classrooms to gain an understanding of the instructional approaches being implemented in high school and college beginning level Japanese, and interviewing students to discover the strategies they used for different language tasks. Information gathered from classroom observations and student interviews was used to develop the *LSQ*, which was piloted in spring 1991. Responses were compared to responses on the student interviews, and *LSQ* items were revised as necessary to reflect student language used to describe particular strategies. Draft

versions of the *SEQ*, *Background Questionnaire*, and *Test of Language* were also developed in Year 1. A major activity during Year 1 was the development of a preliminary learning strategies *Resource Guide* for teachers to use in subsequent years of the study. This resource guide was based on guides previously developed for other languages by some members of the research team. At the time, the same textbook was being used by both high school and college participating teachers, so the draft *Resource Guide* was designed to be used with both high school and college students.

In Year 2 of the study (1991-1992), the *Resource Guide* developed in Year 1 was used by participating college teachers to implement strategies instruction. At the high school level, however, a new textbook was adopted, requiring the development of a new high school *Resource Guide*. Research staff worked closely with college instructors and high school teachers to refine and adapt the strategies lessons to coordinate with the ongoing curriculum, and conducted regular classroom observations. Students were pre- and posttested with the *LSQ*, *SEQ*, and *Test of Language*, and the *Background Questionnaire* was administered at the time of the pretest. At the time of the posttest, teachers ranked their students as High, Medium, or Low in language achievement. In early 1992, students completed a *Midyear Questionnaire* on which they recorded their independent use of strategies and gave reasons why they used or did not use the strategies that had been taught.

In Year 3 of the study (1992-1993), strategies instruction continued to be implemented at both high school and college levels. The instruments used in Year 2 were revised to reflect the instructional focus of Year 3, and administered as pretests and posttests. A *Teacher Interview Guide* and *Observation Summary Form* were used to gather information on teachers' perceptions

of the strategies instruction and on classroom observations. At the college level a quasi-experimental design was used to compare a strategies instruction class with a non-strategies class. A problem-solving process model for strategies instruction which organized the strategies within a metacognitive framework was presented at both the high school and college levels. The college *Resource Guide* was revised to reflect the new framework and to incorporate suggestions made by Japanese instructors. The participating high school teacher in Year 3 taught in a school district with a proficiency-based curriculum and teacher-developed materials, so the high school *Resource Guide* was rewritten to accommodate these changes as well as the new framework.

Major Accomplishments

This study was the first to investigate the applications of learning strategies instruction to beginning level Japanese high school and college classes. Previous research on teaching language learning strategies had focused on Western and Slavic languages such as English (Brown & Perry, 1991; O'Malley et al., 1985b; Rost & Ross, 1991), French (Chamot et al., 1990; Hosenfeld et al., 1981), Russian (Chamot et al., 1990; Thompson & Rubin, 1993), and Spanish (Chamot et al., 1990; Rubin, Quinn, & Enos, 1988). In this section we discuss the contributions that this study has made to learning strategies instruction for beginning level Japanese as a foreign language.

Strategies Identification

Both high school and college Japanese teachers identified the learning strategies they believed would help their students and incorporated strategy instruction into their beginning level classes. The teachers, all native speakers of Japanese, perceived the strategies as useful in helping their students to become more successful in learning Japanese. Because research on

strategies instruction has not previously examined learning strategies for Japanese, this was the first indication that strategies reported for learning Western languages can also be applied to a non-Western language.

Through consultation with Japanese teachers and classroom trials, a number of appropriate strategies were identified for beginning level Japanese classes. Strategies selected by teachers in Year 1 and implemented in Year 2 included: two metacognitive strategies (Directed Attention and Selective Attention); seven cognitive strategies (Contextualization, Creative Repetition, Grouping, Imagery, Personalization, Prediction, and Silent Repetition; and two social-affective strategies (Questioning and Cooperation). (See Table 3 for definitions of these strategies.)

In Year 3 the strategies were organized within a problem-solving process model which emphasized metacognitive knowledge and strategies for Planning, Monitoring, Problem-Solving, and Evaluating. Strategies taught as part of this metacognitive framework included Activating Background Knowledge, Predicting, Selective Attention, Imagery, Inferencing, Contextualization, Grouping, Questioning for Clarification, Cooperation, Evaluating, and Self-Talk.

Selection of strategies for instruction was closely tied to task demands. For example, when the college curriculum placed an emphasis on listening comprehension, strategies selected by teachers included Predicting the content of the listening text and Selectively Attending to key words and ideas. Beginning level Japanese teachers at both high school and college levels found that memory strategies for developing their students' knowledge of vocabulary were quite important to teach. The early introduction of writing in the high school Japanese classes also evoked an interest in teaching students strategies that would assist in recognizing and producing

Japanese characters. Students found that Imagery was the most helpful strategy for learning the Japanese characters.

Although the number of students participating in this study was small, some patterns appeared that tend to confirm earlier research on learning strategies and point to directions for future research. For example, students do use learning strategies independently, and have a wide range of cognitive strategies that they apply to their study of Japanese. As in Vandergrift's (1992) study of novice learners of French, these Japanese novice learners used predominantly cognitive strategies. As Vandergrift suggested, these cognitive strategies can be augmented by the governing influence of metacognitive strategies and the motivational benefits of social-affective strategies. Future strategies instruction should emphasize the value of metacognitive and social-affective strategies in guiding language learning.

Implementation of Strategies Instruction

The implementation of strategies instruction into Japanese classes required close collaboration between teachers and researchers. The acceptability of the strategies instruction by teachers was enhanced by teacher input on strategies selection and lesson design, frequent consultation between teachers and researchers, the development of strategies lessons that focused on curriculum objectives and were visually appealing, and classroom observations.

A major accomplishment of the study was the development of *Resource Guides* for integrating strategies instruction into beginning level Japanese classes. Both teachers and researchers agreed that the strategy lessons needed to be embedded into the curriculum, rather than separated into a special "how to learn" instructional sequence. Therefore, *Resource Guides* were developed for high school and college levels for each year of the study, resulting in the four

Resource Guides contained in Appendices D and E of this report (these Appendices are bound separately from the main body of the report). Each *Resource Guide* contains strategies lessons for students and guidelines for teaching each lesson (see Appendix B for sample college and high school strategy lessons). The four *Resource Guides* thus provide extensive models for strategies lessons, which can be used and adapted by other Japanese teachers wishing to incorporate strategies instruction into their classes.

A significant improvement in the delivery of strategies instruction was the development of a problem-solving process model which not only organized the strategies by task stage (i.e., Planning, Monitoring, Problem-Solving, Evaluating), but also provided a framework for developing metacognitive knowledge in both teachers and students. The model used an analogy of a mountain climber (Figure 1) to illustrate the sequential stages of a task and types of strategies that could be selected for each stage. Teachers found the model successful in communicating a rationale and concrete examples for a strategic approach to language learning.

Strategies Use by Students

All students reported using strategies before instruction, and, in some cases, significantly increased their reported use of strategies after instruction. Strategies reported in open-ended questionnaires were predominantly cognitive, indicating that students preferred task-specific strategies to general metacognitive or social-affective strategies that could be applied to a number of different language tasks. The gains in frequency of use of instructed strategies overall were significant for high school students in Year 3 of the study. These high school students also increased their use of several individual strategies significantly. College students in Year 3 also reported significant gains in frequency of some individual strategies. More pre- to posttest

differences were found in Year 3 than in Year 2, indicating that the refinements in the delivery of instruction may have had a positive effect.

At the conclusion of each year's strategies instruction, students indicated that they were familiar with the instructed strategies and knew how to apply them. Students also reported preferences for strategies that they personally found effective, rejecting strategies that did not work for them. These expressions of strategy preferences indicated that students had become aware of their own language learning processes.

College students in Year 2 who had achieved higher proficiency levels in Japanese also reported higher frequencies of learning strategy use, and used metacognitive strategies more often than did their classmates at lower proficiency levels. However, these relationships between language proficiency and learning strategy use were not found for Year 3 college students or for high school students, although some significant correlations were found between strategies for specific language tasks and subsections of the *Test of Language*.

For high school students there was a significantly positive relationship between the use of learning strategies and their level of confidence, or self-efficacy, for accomplishing specific language tasks in Japanese. The high school students had significant gains each year in their levels of confidence, indicating that they felt more capable of learning Japanese after a year of study than they had at the beginning of the school year.

In contrast, the college results did not show significant correlations between learning strategies use and self-efficacy or increases in self-efficacy across the year. One explanation of the college results is that students gained a more realistic understanding of the difficulties of becoming proficient in Japanese as they were exposed to a demanding intensive beginning level

course in the language. Additionally, an analysis of the language tasks identified on the *Self-Efficacy Questionnaire* and corresponding tasks on the *Learning Strategies Questionnaire* reveals that the negatively correlated tasks were easy ones which probably did not require learning strategies, whereas the more difficult and challenging tasks were positively correlated with both learning strategies use and higher levels of self-efficacy. This may indicate that for adult learners (such as college students), conscious deployment of learning strategies is most useful for tasks that are amenable to higher-level objectives such as learning Kanji vocabulary and reading Hiragana and Katakana, rather than lower-level objectives such as rote learning of vocabulary and grammar rules.

In summary, the major accomplishments of the study were in the identification of strategies, the implementation of strategies instruction, and information about students' use of strategies:

- Appropriate language learning strategies were selected and tested in the classroom, revealing the most relevant strategies for the study of Japanese at the beginning level.
- Resource Guides providing strategies lessons and teaching guidelines for both high school and college levels were developed. Participating teachers implemented the strategies instruction in their classes as part of their regular curriculum and provided information on the ease and effectiveness of the presentation of language learning strategies.

- A problem-solving process model for strategies instruction was developed and proved helpful in organizing strategies instruction within a metacognitive framework.
- Extensive information was collected and analyzed on student use of language learning strategies, showing that students used the strategies and in some cases developed a stronger image of themselves as effective learners over their first year of learning Japanese.

Dissemination Activities

Information about the study and samples of strategies lessons developed for high school and college students of Japanese were disseminated at conferences and teacher workshops throughout the three years of the study **Learning Strategies in Japanese Foreign Language Instruction**. The presentations were met with a high level of interest by Japanese teachers, many of whom expressed the desire to add a learning strategies component to their instruction of Japanese. This interest among Japanese teachers provides an initial indication that strategies instruction is acceptable to many native-speaking teachers of Japanese.

Another aspect of dissemination was that the study was described or cited in a number of publications. Other specific dissemination activities are listed below.

Conference Presentations:

1. Georgetown University Round Table on Languages and Linguistics, 1991. J. Michael O'Malley and Anna Uhl Chamot: "Learning strategies: Implications for language learning methods."

2. Georgetown University Round Table on Languages and Linguistics, 1992. Sarah Barnhardt, Jill Robbins, Gilda Carbonaro, Motoko Omori, and Fumiko Yuasa: "Implementing language learning strategy instruction."
3. Georgetown University Round Table on Languages and Linguistics, 1993. Anna Uhl Chamot and J. Michael O'Malley: "Teaching for strategic learning: Theory and practice." Jill Robbins: "Report on the pilot study of **Learning strategies for the Japanese language classroom.**" Anna Uhl Chamot, Sarah Barnhardt, Jill Robbins, Gilda Carbonaro, Pamela El-Dinary, and Rachel Brown: "Report on learning strategies studies at Language Research Projects, Georgetown University."
4. American Council on the Teaching of Foreign Languages, 1991. Anna Uhl Chamot, J. Michael O'Malley, and Miwa Nishimura: "Learning strategies in Japanese second language instruction."
5. American Council on the Teaching of Foreign Languages, 1992. Anna Uhl Chamot and Sarah Barnhardt: "Learning strategies and assessment in foreign language instruction."
6. American Council on the Teaching of Foreign Languages, 1993. Anna Uhl Chamot and Sarah Barnhardt: "How to teach and assess learning strategies in the foreign language classroom."
7. Conference on the Teaching of Foreign Languages and Literatures, Youngstown State University, 1991. Anna Uhl Chamot: "Teaching learning strategies in the foreign language classroom."

8. American Educational Research Association, 1992. Anna Uhl Chamot: "Learning strategy instruction in the foreign language classroom." J. Michael O'Malley: "Learning strategies, learner effectiveness, and self-efficacy in foreign language instruction."
9. Teachers of English to Speakers of Other Languages, 1992. Anna Uhl Chamot and J. Michael O'Malley: "Teaching our students how to learn."
10. National Association for Bilingual Education, 1992. Anna Uhl Chamot: Teaching learning strategies in the language classroom."

Teacher Workshops

1. Three day training institute for foreign language instructors in Language Training Division at the Office of Training and Education, Washington, DC (1991).
2. One day workshop for foreign language teachers in Alief Independent School District, Houston, TX (1993).

Publications

1. Chamot, A.U. (forthcoming). Student responses to learning strategy instruction in the foreign language classroom. Foreign Language Annals.
2. Chamot, A.U. (1991). Cognitive instruction in the second language classroom: The role of learning strategies. In Linguistics, Language Teaching and Language Acquisition: The Interdependence of Theory, Practice and Research, edited by J.E. Alatis. Georgetown University Round Table on Languages and Linguistics 1990. Washington, DC: Georgetown University Press.
3. Chamot, A.U., & O'Malley, J.M. (1993). The CALLA handbook: How to implement the Cognitive Academic Language Learning Approach, pp. 183-186. Reading, MA: Addison-Wesley.
4. Chamot, A. U., & O'Malley, J.M. (1993). Teaching for strategic learning: Theory and practice. In J.E Alatis (Ed.), Strategic Interaction and Language Acquisition: Theory, Practice, and Research. Georgetown University Round Table on Languages and Linguistics 1993. Washington, DC: Georgetown University Press.

5. Chamot, A.U., & O'Malley, J.M. (forthcoming). Language learner and learning strategies. In N.C. Ellis (Ed.), Implicit and explicit learning of languages. San Diego, CA: Academic Press.
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Additional proposals for future conferences and for refereed journal articles have been submitted, but information about acceptance had not been received at this writing.

Emerging Issues in Strategies Instruction for Japanese

In carrying out this study, a number of issues have emerged that merit thoughtful consideration by language learning strategies researchers and practitioners. Although these issues became prominent in this study, which focused on beginning level Japanese instruction, they represent concerns that apply to strategies instruction for any language. In this section we address four major issues in strategies instruction that have not yet been resolved. These are:

language of instruction, curricular integration of strategies, language tasks for strategies instruction, and amount of strategies instruction.

Language of Strategies Instruction

When strategies instruction is presented in beginning level classes, the language of strategies instruction is necessarily the native language or a language that students understand well. This is because students are not yet proficient enough in the target language to comprehend explanations about strategy value and applications. However, in proficiency-based foreign language classrooms, teachers attempt to conduct almost all of the class in the target language. Therefore, any recourse to native language explanations (for example, for learning strategies instruction) may be perceived as detrimental to target language acquisition. On the other hand, if students are still thinking in their native language at the beginning stage of foreign language acquisition, then abstract concepts such as learning strategies are probably most accessible through their native language.

In this study we sought to mitigate this difficulty by providing Japanese names for the instructed strategies, which we hoped would help teachers provide some of the strategies instruction in the target (rather than the native) language. This approach met with limited success. Students found that Japanese strategy names became simply another vocabulary item to learn, and teachers believed that strategic processing for beginning level students had to be done in the students' native language (or English, in the case of immigrant students) rather than in Japanese. Teachers also indicated that strategies instruction in Japanese would benefit only students who are already linguistically proficient (who could understand the strategies

explanations), while less proficient students (who are in most need of learning strategies) would not be able to understand the teacher's explanations in the target language.

One solution to the problem of using class time to provide strategies instruction in English was demonstrated by the Japanese college instructors, who began to provide individualized strategies instruction to students outside of the class period, during their regularly scheduled office hours. This is not a feasible undertaking for large classes or for high school students and teachers who have limited time for individual conferences. However, it would be possible to provide strategies instruction for beginning level Japanese in English (or other student native language) through a computer-based strategies instruction program that students could work on outside of class.

The issue of language of strategies instruction becomes less problematic at more advanced levels of language study, when students have developed sufficient proficiency in the target language to understand the instruction without recourse to English. In a parallel concurrent study, third year high school students of Spanish were able to understand and even discuss learning strategies in the target language (Chamot et al., in press). Given the difficulty of Japanese, the timetable may be somewhat different, but it is reasonable to expect that intermediate level students of Japanese can be expected to profit from learning strategies instruction in Japanese.

Integration of Strategies Instruction into Curriculum

In part because Japanese teachers see the need to provide strategies instruction for beginning level students in English, the presentation of strategies instruction can easily become a separate activity rather than an integral part of the language class. Students may then perceive

learning strategies as an option rather than as essential aspect of language learning. In this study, researchers worked closely with teachers to develop strategies lessons coordinated with the course curriculum. This collaboration may have led to teachers' over-reliance on the researchers to develop the learning strategies lessons, rather than developing their own strategies lessons. This was in contrast to the parallel study with Russian and Spanish high school classrooms, where teachers in the second semester began to develop their own strategies lessons and were able to integrate them into their on-going instruction smoothly and without apparent difficulties.

This issue is one that should be pursued in future studies of Japanese language teaching. Our observations in the current study are that the curricula for beginning level Japanese instruction at high school and college levels is closely tied to the adopted textbooks. A notable exception was the Year 3 high school teacher, who was developing a proficiency curriculum independent of textbooks. The assistance of project staff in creating strategies lessons to accompany the proficiency curriculum was well-received by the teacher. At the college level, however, the demands of the textbook-driven curriculum in an intensive language program made it very difficult for instructors to find time to provide strategies instruction as a part of the textbook lessons.

Language Tasks for Strategies Instruction

The design of this study sought to match specific learning strategies to the kinds of language tasks emphasized in the curriculum. For example, the college level curriculum emphasized listening and speaking tasks at the beginning level of Japanese, so the strategies instruction sought to provide students with a variety of opportunities to practice listening comprehension and speaking strategies. The Japanese instructors indicated that it was difficult

for students to grasp strategies applications for oral language skills, and suggested that affective factors such as anxiety might inhibit beginning level students from fully applying instructed strategies to oral language tasks. The instructors suggested that learning strategies might be more successfully introduced with reading and writing tasks. The reasons given were that reading and writing activities may appear more concrete to students than oral activities, and that positive experiences with using strategies for reading and writing would assist in convincing students of their value for oral language tasks. This approach would be feasible in a program that introduced written Japanese from the beginning, but in the case of programs that emphasize oral skills during the first months of beginning Japanese, strategies instruction would have to be delayed until the introduction of the written language.

Amount of Strategies Instruction

A fourth issue in strategies instruction for Japanese concerns the number of strategies to be taught in a beginning course and the amount of time needed for the explicit instruction. Students, and even teachers, may find a large number of strategies difficult to distinguish and remember. On the other hand, students need to be exposed to a variety of strategies if they are to develop a strategic repertoire from which they can select strategies appropriate to a specific language task.

The amount of time devoted to explicit strategies instruction is difficult to ascertain in advance. Some college level students, for example, seemed to need only an introduction and overview to the learning strategies, and some high school students indicated that they were already using the strategies. Other students, however, appeared to need a considerable amount of explicit instruction and activities for practicing the strategies. Gauging the right amount of

explicit strategies instruction and knowing when students are ready to use the strategies independently is an issue which likely has to be decided on a case by case basis, depending on the composition of individual classes.

Future Research Directions on Learning Strategies for Japanese

Because this study was only the first to investigate learning strategies applications to Japanese foreign language instruction, considerable additional research remains to be done. As the number of participating classrooms was small, the results of this study need to be replicated in additional Japanese classrooms.

An important need for future research is studies with larger numbers of students and teachers. Although Japanese instructional programs in American schools are growing rapidly, programs in individual school districts frequently employ only one or two Japanese teachers. The limited availability of classrooms within a particular area is a challenge to conducting true experimental research designed to compare the effects of student groups instructed on strategies with those not receiving the instruction. Adequate ways of assessing language gains need to be explored as well, especially with beginning level high school students for whom standardized tests are inappropriate.

There is also a need for research at higher levels of Japanese study to ascertain the strategic needs of intermediate and advanced level students. This research would need to identify learning strategies for reading and writing Japanese (e.g., determine whether different strategies are effective for decoding *kana* and *kanji*, as compared to those that facilitate reading for comprehension). Specific strategies for developing intermediate and advanced level oral communicative skills should also be explored. Longitudinal research on the development and

continuation of strategies applications as students increase their proficiency in Japanese would help determine an appropriate sequence for strategies instruction at beginning, intermediate, and advanced levels of Japanese study.

Considerable research remains to be done on teaching methods for strategies instruction. The amount and timing of explicit instruction needs to be explored further, perhaps through simple experiments with individual strategies for specific language tasks. Similarly, the amount and type of professional development for teachers interested in integrating strategies instruction in their Japanese classrooms needs additional study.

As the economic and cultural ties between the U.S. and Japan become stronger, it will be increasingly important for Americans to achieve more than an elementary understanding of the Japanese language. Because so little is known about how Americans are learning Japanese, further research into the questions raised by this study is imperative. If learning strategies were to be integrated with the curriculum, would there be a lower attrition rate in Japanese classes? And would the students who remain in the class be able to reach a higher level of proficiency, thanks to their use of learning strategies? In the interest of having more students continue their study of Japanese beyond the elementary level, it would be beneficial to use a method that helps students to feel more confident about their ability to learn the language, which is what learning strategies use seems to do. Producing a generation of American students with ample opportunities to gain fluency in Japanese will require that we carefully examine our methods of teaching it and look for ways to improve the learner's prospects for success in learning Japanese. Learning strategies instruction merits further research as a way of promoting successful Japanese language learning.

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Appendix A Instruments

Appendix A - 1
Learning Strategies Questionnaires

Appendix A - 1.1
Learning Strategies Questionnaire Year 2 High School Version

Name: _____ Date: _____

LEARNING STRATEGIES IN THE HIGH SCHOOL JAPANESE LANGUAGE CLASS

Directions: Over the past school year, you have been part of a research project on language learning. With thanks for your participation, we would like you to complete this questionnaire about what you actually do when performing certain tasks in your Japanese class.

The questionnaire describes five tasks you might encounter in your Japanese class. Each task is presented on a separate page. Below each task are statements describing learning techniques, practices, tools, or strategies you might use to perform the task.

Please read the description of each task. Then read each statement about possible study techniques. Circle one of the options (Never, Rarely, Sometimes, Usually or Always) to show how *often* you do the activity described.

This list is not complete, so if you do anything else, please jot it down in the space provided at the end of each page.

There are no right or wrong answers. There are only answers that tell what you actually do.

TASK 1: Learning new vocabulary in Japanese

—> How do you go about learning the new words, phrases, and expressions?

1. I concentrate very hard on the vocabulary, putting away things which might distract me.

Never Rarely Sometimes Usually Always

2. I use lists or flashcards to learn the vocabulary.

Never Rarely Sometimes Usually Always

3. I picture myself using the word or phrase in an appropriate situation.

Never Rarely Sometimes Usually Always

4. I write sentences or make up a story using the new words and expressions.

Never Rarely Sometimes Usually Always

5. I try to relate the vocabulary to myself, my interests, and personal experiences.

Never Rarely Sometimes Usually Always

6. I visualize what the words or phrases mean, or I imagine or draw a picture that I can associate with the new vocabulary.

Never Rarely Sometimes Usually Always

7. I put similar words or expressions into groups or categories.

Never Rarely Sometimes Usually Always

8. I practice the words and expressions using real objects.

Never Rarely Sometimes Usually Always

- ▶▶▶ Are there any other things you do when you learn new words, phrases, or expressions in Japanese?

TASK 2: Listening to Japanese in class

—> How do you go about listening to Japanese in class?

9. Before listening, I consider the topic and think about vocabulary I might hear.

Never Rarely Sometimes Usually Always

10. I consciously decide in advance what I need to listen for and then I listen specifically for that information.

Never Rarely Sometimes Usually Always

11. When I don't understand something the teacher says, I tend to tune out.

Never Rarely Sometimes Usually Always

12. I try to relate what I'm hearing to my own experiences or to information I already know.

Never Rarely Sometimes Usually Always

13. After listening, I think about what I understood, and I check how well I prepared myself to listen.

Never Rarely Sometimes Usually Always

▶▶▶ Are there any other things you do to help yourself understand the Japanese you hear in class?

I (Sometimes, Usually, Always) _____

TASK 3: Speaking Japanese in class

—> How do you go about speaking Japanese in class?

14. I listen carefully to what I say and correct myself when I know I've made a mistake.

Never Rarely Sometimes Usually Always

15. I watch the listener's reaction to what I've said to see if I'm making sense.

Never Rarely Sometimes Usually Always

16. When working in groups with classmates, I try to keep the conversations in Japanese only.

Never Rarely Sometimes Usually Always

17. I use Japanese phrases like "Soo desu nee" to sound more like a native speaker.

Never Rarely Sometimes Usually Always

18. I practice speaking Japanese with classmates or others outside of class.

Never Rarely Sometimes Usually Always

- ▶▶▶ Are there any other things you do or think about when you're speaking Japanese in class?

TASK 4: Listening to the Japanese tapes

— Check here if you don't find it necessary to listen to the tapes. Don't answer the questions on this page. Go on to Task 5.

If you *do* listen to the tapes, please respond to the following statements.

—> **How do you make use of the tapes to learn Japanese?**

19. I listen to the tape while looking at the written version in my book.

Never Rarely Sometimes Usually Always

20. I replay the tape and alter the way I listen to it (such as once for words, once for tones, once for how it sounds, once for repeating sentences myself).

Never Rarely Sometimes Usually Always

21. I think about how I might use this language in real life.

Never Rarely Sometimes Usually Always

22. I listen to the tapes and repeat, using real objects when possible.

Never Rarely Sometimes Usually Always

23. I change the given expressions or dialogues and produce them with variations.

Never Rarely Sometimes Usually Always

24. I practice the expressions or dialogues with a partner.

Never Rarely Sometimes Usually Always

▶▶▶ **Are there any other things you do or pay attention to when you're working with the tapes?**

TASK 5: *Reading a passage in Japanese*

—> **How do you go about reading in Japanese?**

25. I sound out the Japanese characters one by one as I read, until I recognize that, together, they make a word.

Never Rarely Sometimes Usually Always

26. I read the passage aloud, so I can figure out where one word begins and another ends.

Never Rarely Sometimes Usually Always

27. I look for Katakana characters and sound them out to see if they sound like a word I know in English.

Never Rarely Sometimes Usually Always

28. I first look for words I recognize, skipping over words I don't know for the time being.

Never Rarely Sometimes Usually Always

29. If I know the topic of the reading, I use what I already know about the topic to try and guess the meaning of unfamiliar words.

Never Rarely Sometimes Usually Always

30. I look for groups of characters that form words I know.

Never Rarely Sometimes Usually Always

32. If possible, I work on the reading with another student so we can figure it out together.

Never Rarely Sometimes Usually Always

▶▶▶ **Are there any other things you do or pay attention to when you're reading Japanese?**

You have finished this questionnaire. Thank you very much for your cooperation.

Appendix A - 1.2
Learning Strategies Questionnaire Year 2 College Version

Name: _____ Date: _____

LEARNING STRATEGIES IN THE UNIVERSITY JAPANESE LANGUAGE CLASS

Directions: Over the past school year, you have been part of a research project on language learning. With thanks for your participation, we would like you to complete this questionnaire about what you actually do when performing certain tasks in your Japanese class.

The questionnaire describes four tasks you might encounter in your Japanese class. Each task is presented on a separate page. Below each task are statements describing learning techniques, practices, tools, or strategies you might use to perform the task.

Please read the description of each task. Then read each statement about possible study techniques. Circle one of the options (Never, Rarely, Sometimes, Usually or Always) to show how *often* you do the activity described.

This list is not complete, so if you do anything else, please jot it down in the space provided at the end of each page.

There are no right or wrong answers. There are only answers that tell what you actually do.

TASK 1: Learning new vocabulary in Japanese

<i>TASK 1: Learning new vocabulary in Japanese</i>	
Description of the task:	You have to learn new vocabulary (words, phrases, and expressions) for each core conversation in Japanese.

—> How do you go about learning the new words, phrases, and expressions?

- I concentrate very hard on the vocabulary, putting away things which might distract me.
Never Rarely Sometimes Usually Always
- I use lists or flashcards to learn the vocabulary.
Never Rarely Sometimes Usually Always
- I picture myself using the word or phrase in an appropriate situation.
Never Rarely Sometimes Usually Always
- I write sentences or make up a story using the new words and expressions.
Never Rarely Sometimes Usually Always
- I try to relate the vocabulary to myself, my interests, and personal experiences.
Never Rarely Sometimes Usually Always
- I visualize what the words or phrases mean, or I imagine or draw a picture that I can associate with the new vocabulary.
Never Rarely Sometimes Usually Always
- I put similar words or expressions into groups or categories.
Never Rarely Sometimes Usually Always
- I practice the words and expressions using real objects.
Never Rarely Sometimes Usually Always

▶▶▶ Are there any other things you do when you learn new words, phrases, or expressions in Japanese?

I (Sometimes, Usually, Always) _____

TASK 2: *Listening to Japanese in class*

Description of the task:

In a typical class period, your teacher uses Japanese to give directions, explain new material, review old material, and ask questions.

—> **How do you go about listening to Japanese in class?**

9. Before listening, I consider the topic and think about vocabulary I might hear.

Never Rarely Sometimes Usually Always

10. I consciously decide in advance what I need to listen for and then I listen specifically for that information.

Never Rarely Sometimes Usually Always

11. When I don't understand something the professor says, I tend to tune out.

Never Rarely Sometimes Usually Always

12. I try to relate what I'm hearing to my own experiences or to information I already know.

Never Rarely Sometimes Usually Always

13. After listening, I think about what I understood, and I check how well I prepared myself to listen.

Never Rarely Sometimes Usually Always

▶▶▶ **Are there any other things you do to help yourself understand the Japanese you hear in class?**

I (Sometimes, Usually, Always) _____

TASK 3: Speaking Japanese in class

Description of the task:

Your professor requires class participation in every class. This means that you have to speak Japanese in class, including the core conversations, asking and answering questions, and participating in oral drills.

—> How do you go about speaking Japanese in class?

14. I listen carefully to what I say and correct myself when I know I've made a mistake.

Never Rarely Sometimes Usually Always

15. I watch the listener's reaction to what I've said to see if I'm making sense.

Never Rarely Sometimes Usually Always

16. When working in groups with classmates, I try to keep the conversations in Japanese only.

Never Rarely Sometimes Usually Always

17. I use Japanese phrases like "etoo," or "anoo" to sound more like a native speaker.

Never Rarely Sometimes Usually Always

18. I use only what I am sure I know how to say in Japanese, so that others can understand me.

Never Rarely Sometimes Usually Always

19. I practice speaking Japanese with classmates or others outside of class.

Never Rarely Sometimes Usually Always

20. After speaking I think about how I could have said things better.

Never Rarely Sometimes Usually Always

▶▶▶ Are there any other things you do or think about when you're speaking Japanese in class?

I (Sometimes, Usually, Always) _____

TASK 4: Listening to the Japanese tapes

Description of the task:

You have tapes of the core conversations and drills to use at home. The core conversations and the drills are also printed in your book.

— Check here if you don't find it necessary to listen to the tapes. Don't answer the questions on this page. You have finished the questionnaire. Thank you very much for your cooperation.

If you *do* listen to the tapes, please continue with the questionnaire.

—> **How do you make use of the tapes to learn Japanese?**

21. I listen to the core conversations while looking at the written version in my book.

Never Rarely Sometimes Usually Always

22. I do the drills while looking at the written version in my book.

Never Rarely Sometimes Usually Always

23. I replay the tape and alter the way I listen to it (such as once for words, once for tones, once for how it sounds, once for repeating sentences myself).

Never Rarely Sometimes Usually Always

24. I think about how I might use this language in real life.

Never Rarely Sometimes Usually Always

25. If I know the topic of the core conversations before listening, I use what I already know about the topic to guess what Japanese I might hear.

Never Rarely Sometimes Usually Always

26. I listen to the tapes and repeat, using real objects when possible.

Never Rarely Sometimes Usually Always

27. The first time I listen to the core conversations, I try to see how much I can understand *without* looking at the book.

Never Rarely Sometimes Usually Always

28. I change the given conversations and produce them with variations.

Never Rarely Sometimes Usually Always

29. I practice the core conversations with a partner.

Never Rarely Sometimes Usually Always

30. When a drill is difficult I skip it and come back to it later.

Never Rarely Sometimes Usually Always

- ▶▶▶ Are there any other things you do or pay attention to when you're working with the tapes?

I (Sometimes, Usually, Always) _____

You have finished this questionnaire. Thank you very much for your cooperation.

Appendix A - 1.3
Learning Strategies Questionnaire Year 3 Version

Learning Strategies Questionnaire

- ♦ Your class has been chosen to be part of a research project on language learning. With thanks for your participation, we would like you to complete this questionnaire about what you actually do when you are studying Japanese.
- ♦ Please read each statement and then circle the option that tells *how often* you do the activity described.
- ♦ **Note: If you haven't reached the level of Japanese asked about in a question, circle the "never" choice for that question.**
- ♦ This list is not complete, so if you do anything else, please jot it down in the space provided at the end of each section.
- ♦ *There are no right or wrong answers. There are only answers that tell what you actually do.*



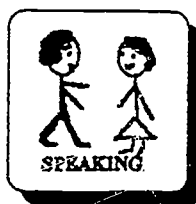
1. Before listening, I think about what I already know about the topic..... Never...Rarely... Sometimes...Usually...Almost Always
2. I decide in advance what I need to listen for, and then I listen for this information..... Never...Rarely... Sometimes...Usually...Almost Always
3. While listening, I picture in my mind what I am hearing..... Never...Rarely... Sometimes...Usually...Almost Always
4. I try to relate what I'm hearing to my own experiences or to things I already know..... Never...Rarely... Sometimes...Usually...Almost Always
5. If I get confused about a single word or phrase in what I'm hearing, I can't understand the whole conversation or assignment..... Never...Rarely... Sometimes...Usually...Almost Always
6. I try to pinpoint which words or phrases I don't understand so that I can ask for a specific explanation..... Never...Rarely... Sometimes...Usually...Almost Always
7. After listening I decide if what I thought I understood makes sense..... Never...Rarely... Sometimes...Usually...Almost Always
8. After I finish listening, I evaluate how well my listening strategies or techniques helped me to understand..... Never...Rarely... Sometimes...Usually...Almost Always
9. If there's one part I don't understand, I try to guess what it is from the parts I do understand..... Never...Rarely... Sometimes...Usually...Almost Always
10. When I listen to Japanese on a tape, it's hard for me to imagine what the speakers are doing or what social situation they're in..... Never...Rarely... Sometimes...Usually...Almost Always

♦ Are there any other things you do when you listen to your teacher in class, or to Japanese tapes or native speakers?



11. Before I read, I think about what I know about the topic..... Never...Rarely... Sometimes...Usually...Almost Always
12. I decide in advance what my reading purpose is, and then I read specifically for that information..... Never...Rarely... Sometimes...Usually...Almost Always
13. I make mental pictures of what I am reading..... Never...Rarely... Sometimes...Usually...Almost Always
14. While I am reading, I see if the information makes sense, based on what I already know about the subject..... Never...Rarely... Sometimes...Usually...Almost Always
15. I look for parts of the Kanji characters to give me a clue to their meanings..... Never...Rarely... Sometimes...Usually...Almost Always
16. I refer back to my notes very often when reading Kanji..... Never...Rarely... Sometimes...Usually...Almost Always
17. After reading, I decide whether what I read made sense..... Never...Rarely... Sometimes...Usually...Almost Always
18. After I've finished reading, I decide whether the strategies or techniques I used helped me understand..... Never...Rarely... Sometimes...Usually...Almost Always
19. I try to ask in Japanese about things I don't understand in the reading..... Never...Rarely... Sometimes...Usually...Almost Always
20. When I'm reading Kanji, it helps me to think of the stories I learned to go along with them..... Never...Rarely... Sometimes...Usually...Almost Always

♦ Are there any other things you do when you read Japanese, in Hiragana, Katakana, or Kanji?



21. I listen carefully to what I say and correct myself when I know I've made a mistake..... Never...Rarely... Sometimes...Usually...Almost Always
22. When working in groups with classmates, I try to keep the conversation in Japanese..... Never...Rarely... Sometimes...Usually...Almost Always
23. I think of how I would use Japanese in real life situations when I practice speaking it..... Never...Rarely... Sometimes...Usually...Almost Always
24. I practice saying the kinds of things in Japanese I will be expected to say in class..... Never...Rarely... Sometimes...Usually...Almost Always
25. I try to speak in Japanese to native speakers whenever I get a chance to do so..... Never...Rarely... Sometimes...Usually...Almost Always
26. After I speak in class, I feel too embarrassed to think about how well I was understood..... Never...Rarely... Sometimes...Usually...Almost Always
27. If I can't make myself understood in Japanese, I switch to English right away..... Never...Rarely... Sometimes...Usually...Almost Always
28. I practice new expressions or dialogues with a partner outside of class..... Never...Rarely... Sometimes...Usually...Almost Always
29. While speaking Japanese I look at the listener's face to see if they understand..... Never...Rarely... Sometimes...Usually...Almost Always
30. I tell myself that I *can* speak Japanese if I will keep on trying..... Never...Rarely... Sometimes...Usually...Almost Always

♦ Are there any other things you do when you speak Japanese in class, or to Japanese speakers outside of class?

Appendix 1.3.1
Explanation of Learning Strategies as Reflected on
Learning Strategies Questionnaire Year 3 Version

The LSQ which follows is a draft indicating the strategies respresented by specific items . The strategies are divided into the steps of the problem-solving process model:

- ♦ Planning
- ♦ Monitoring
- ♦ Problem-Solving
- ♦ Evaluation



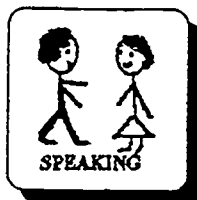
My notes are coded as: P= Planning; M = Monitoring, PS = Problem-solving, E = Evaluation,
D= discrimination item

1. Before listening, I think about what I already know about the topic.....
P- (background knowledge activation) (this font will be a little larger in the final version)
Never...Rarely... Sometimes...Usually...Almost Always
 2. I decide in advance what I need to listen for, and then I listen for this information...
P- (selective attention) Never...Rarely... Sometimes...Usually...Almost Always
 3. While listening, I picture in my mind what I am hearing.....
M- (imagery) Never...Rarely... Sometimes...Usually...Almost Always
 4. I try to relate what I'm hearing to my own experiences or to things I already know.....
M- (personalization, relating to prior knowledge) Never...Rarely... Sometimes...Usually...Almost Always
 5. If I get confused about a single word or phrase in what I'm hearing, I can't understand the whole conversation or assignment.....
D- (negative inferencing) Never...Rarely... Sometimes...Usually...Almost Always
 6. I try to pinpoint which words or phrases I don't understand so that I can ask for a specific explanation.....
PS - (questioning for clarification) Never...Rarely... Sometimes...Usually...Almost Always
 7. After listening I decide if what I thought I understood makes sense.....
E- (evaluating comprehension) Never...Rarely... Sometimes...Usually...Almost Always
 8. After I finish listening, I evaluate how well my listening strategies or techniques helped me to understand.....
E- (evaluating use of strategies) Never...Rarely... Sometimes...Usually...Almost Always
 9. If there's one part I don't understand, I try to guess what it is from the parts I do understand.....
PS- (inferencing) Never...Rarely... Sometimes...Usually...Almost Always
 10. When I listen to Japanese on a tape, it's hard for me to imagine what the speakers are doing or what social situation they're in.....
D- (negative contextualization) Never...Rarely... Sometimes...Usually...Almost Always
- ♦ "Are there any other things you do...".
(with lines to fill in)



11. Before I read, I think about what I know
about the topic..... Never...Rarely... Sometimes...Usually...Almost Always
P-(background knowledge activation)
12. I decide in advance what my reading purpose
is, and then I read specifically for that
information..... Never...Rarely... Sometimes...Usually...Almost Always
P-(selective attention)
13. I make mental pictures of what I am
reading..... Never...Rarely... Sometimes...Usually...Almost Always
M-(imagery)
14. While I am reading, I see if the information
makes sense, based on what I already know
about the subject..... Never...Rarely... Sometimes...Usually...Almost Always
M-(relating to prior knowledge)
15. I look for parts of the Kanji characters to
give me a clue to their meanings..... Never...Rarely... Sometimes...Usually...Almost Always
PS-(inferencing)
16. I refer back to my notes very often when
reading Kanji..... Never...Rarely... Sometimes...Usually...Almost Always
D-(negative inferencing)
17. After reading, I decide whether what I read
made sense..... Never...Rarely... Sometimes...Usually...Almost Always
E-(evaluating comprehension)
18. After I've finished reading, I decide whether
the strategies or techniques I used helped me
understand..... Never...Rarely... Sometimes...Usually...Almost Always
E-(evaluating strategy use)
19. I try to ask in Japanese about things I don't
understand in the reading..... Never...Rarely... Sometimes...Usually...Almost Always
PS-(questioning for clarification)
20. When I'm reading Kanji, it helps me to think
of the stories I learned to go along with
them..... Never...Rarely... Sometimes...Usually...Almost Always
M-(Imagery)

♦ Are there any other things you do when you read Japanese, in Hiragana, Katakana, or Kanji?



21. I listen carefully to what I say and correct myself when I know I've made a mistake..... Never...Rarely... Sometimes...Usually...Almost Always
M - (monitoring production)
22. When working in groups with classmates, I try to keep the conversation in Japanese..... Never...Rarely... Sometimes...Usually...Almost Always
PS - (cooperation)
23. I think of how I would use Japanese in real life situations when I practice speaking it..... Never...Rarely... Sometimes...Usually...Almost Always
PS- (contextualization)
24. I practice saying the kinds of things in Japanese I will be expected to say in class..... Never...Rarely... Sometimes...Usually...Almost Always
M- (rehearsal)
25. I try to speak in Japanese to native speakers whenever I get a chance to do so..... Never...Rarely... Sometimes...Usually...Almost Always
PS- (contextualization/cooperation)
26. After I speak in class, I feel too embarrassed to think about how well I was understood..... Never...Rarely... Sometimes...Usually...Almost Always
D- (negative self-management)
27. If I can't make myself understood in Japanese, I switch to English right away..... Never...Rarely... Sometimes...Usually...Almost Always
D- (negative monitoring production)
28. I practice new expressions or dialogues with a partner outside of class..... Never...Rarely... Sometimes...Usually...Almost Always
PS- (cooperation)
29. While speaking Japanese I look at the listener's face to see if they understand..... Never...Rarely... Sometimes...Usually...Almost Always
M- (monitoring production)
30. I tell myself that I can speak Japanese if I will keep on trying..... Never...Rarely... Sometimes...Usually...Almost Always
M- (self-talk)
- ♦ Are there any other things you do when you speak Japanese in class, or to Japanese speakers outside of class?

Appendix A - 2.1
High School Self-Efficacy Questionnaire

Name: _____ Date: _____

Language Learning Capability

Rate Your Language Learning Capability: You are going to be shown several types of language learning activities. For each activity, you are going to rate, on the scale provided, how sure you are that you could work on a language task *like the one shown* and learn what you are supposed to learn in a reasonable amount of time.

The rating scale goes from 0 to 100. Remember that the higher the number you mark, the more sure you are, while the lower the number, the less sure you are. Please mark how you *really* feel about your capability to do the language learning task.

TASK 1: VOCABULARY

おふろ

レストラン

benkyō

shūkudai

ごはん

アイス・クリーム

ケーキ

きのう

おととい

のみます (のむ)

みます (みる)

ききます (きく)

かいます (かう)

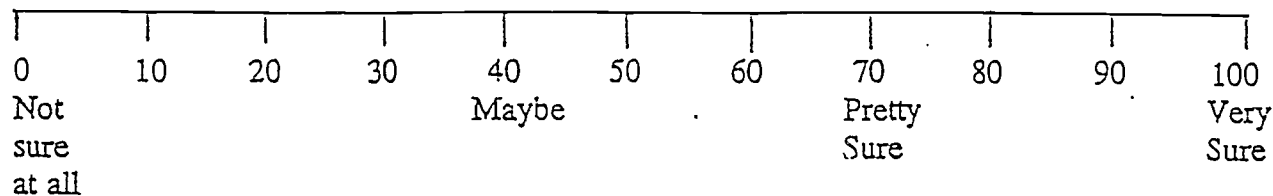
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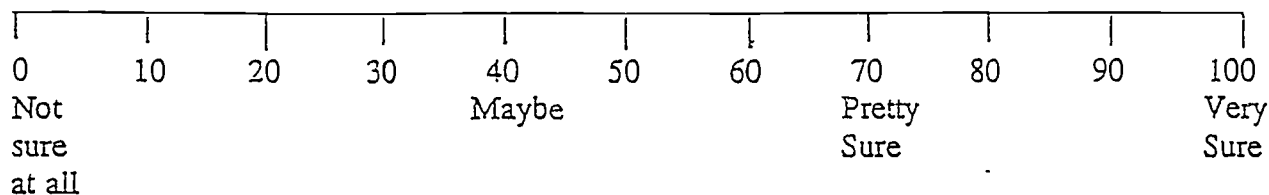
Task 1: Vocabulary Learning (Hiragana and Katakana)

Circle the number on the line that shows how sure you are that you could be given a list of words like those shown and...

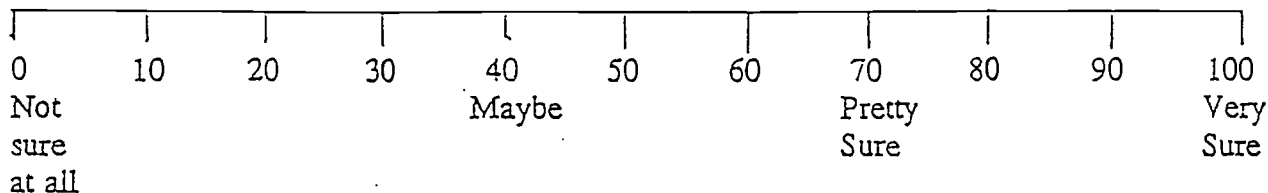
1. ...read each word and pronounce it correctly.



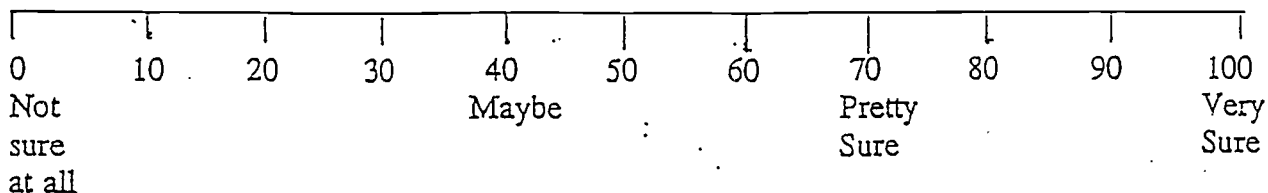
2. ...learn what each word means.



3. ...say sentences that use each word correctly.



4. ...hear sentences using these words and understand what the sentences mean.



(continued on the next page)

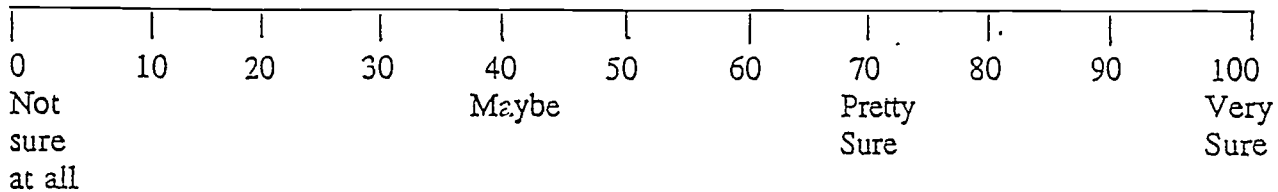
Task 1 (continued)
Vocabulary Learning (Hiragana and Katakana)

Circle the number on the line that shows how sure you are that you could be given a list of words like those shown and...

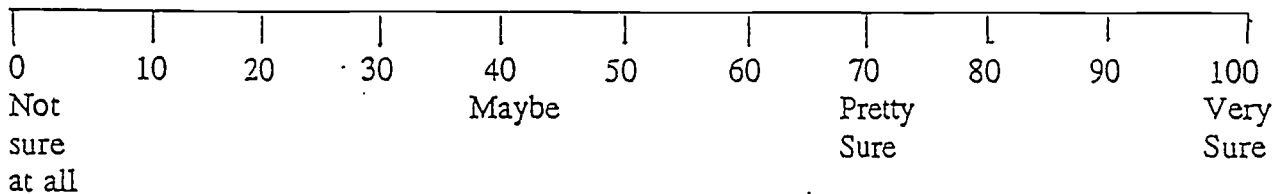
5. ...learn to write each word.



6. ...write sentences using these words.



7. ...read or hear each word a month later and remember what it means.

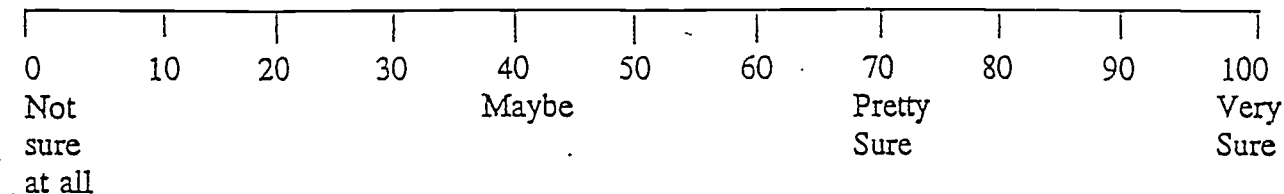


東
西
南
北
元
氣
馬

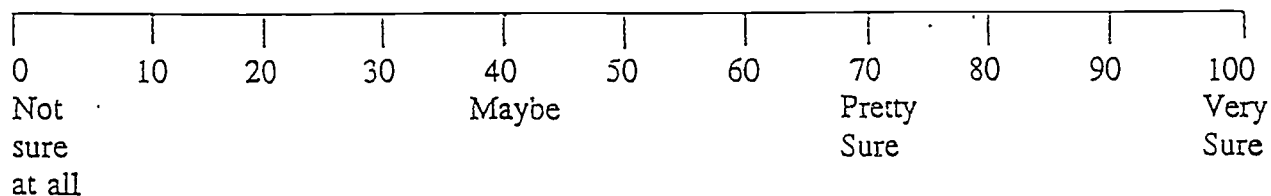
Task 2: Vocabulary Learning (Kanji)

Circle the number on the line that shows how sure you are that you could be given a list of words like those shown and...

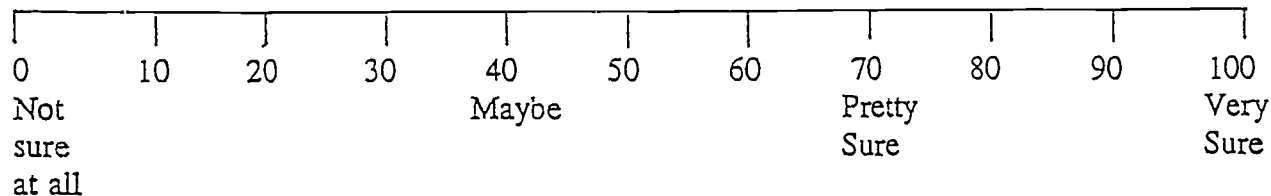
1. ...recognize each Kanji character one week after it's introduced to you and remember what the character means.



2. ...read sentences that have Kanji characters in them and understand what the sentences mean.



3. ...learn to write each Kanji character.



TASK 3:

たなか： なにを たべますか。

アカウ： ビッグ・マックと

ポテト・フライを おねがいします。

たなか： のみものは？

アカウ： コーラ

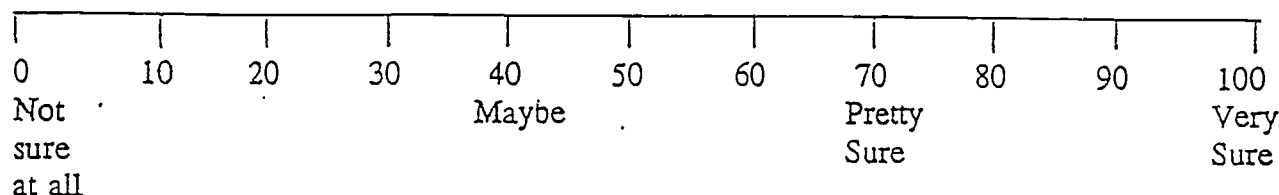
たなか： じゃあ、⁴ここに いてください。

ぼくが⁴ かいますから。

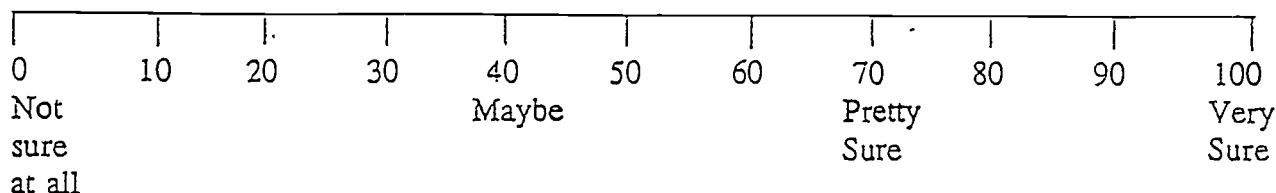
Task 3: Dialogue Learning (Text written in Hiragana and Katakana)

Circle the number on the line that shows how sure you are that you could be given a dialogue like the one shown and...

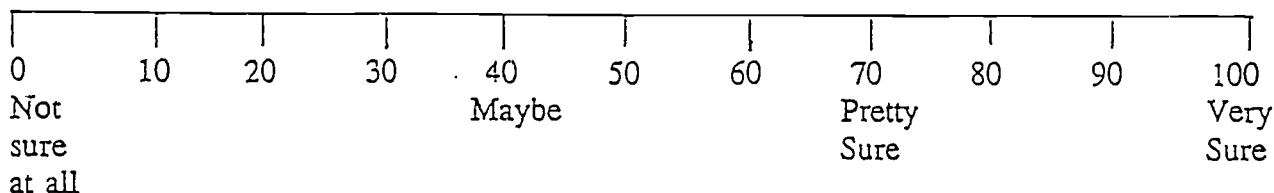
1. ...read it and understand it.



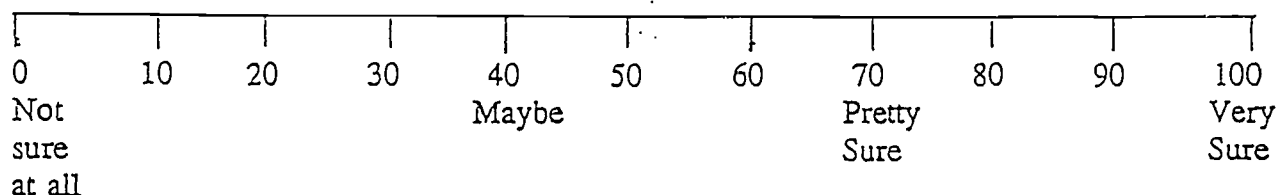
2. ...read it aloud with correct intonation.



3. ...listen to it and understand it without referring to a written text.



4. ...write the dialogue, if it were read to you as a dictation.



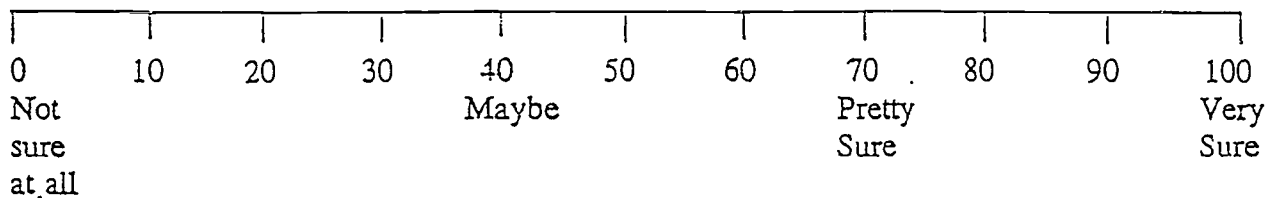
(continued on next page)

Task 3 (continued)

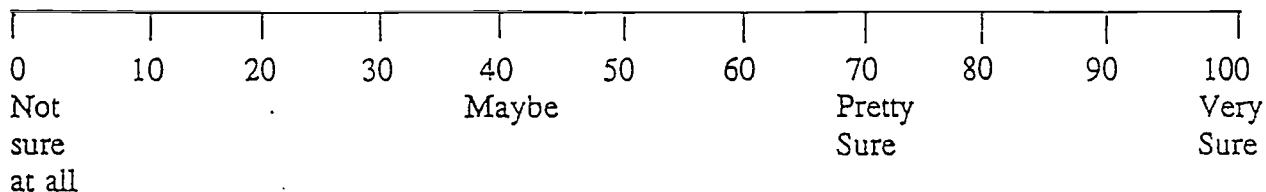
Dialogue Learning (Text written in Hiragana and Katakana)

Circle the number on the line that shows how sure you are that you could be given a dialogue like the one shown and...

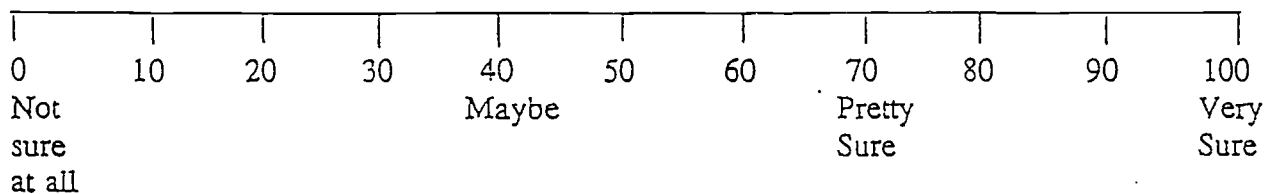
5. ...memorize it.



6. ...respond correctly in substitution drills that practice its key vocabulary and grammar.



7. ...correctly use parts of the dialogue in other situations.



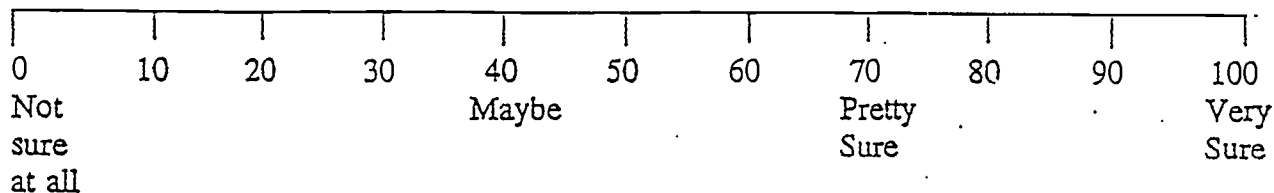
メリーさんと　じろうくんは
どうぶつえんへ　いきました。

トムさんと　よう子さんも
どうぶつえんへ　いきました。

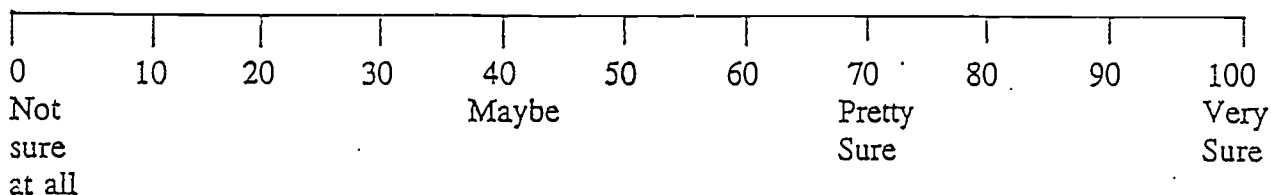
Task 4: A Reading Passage (in Hiragana and Katakana)

Circle the number on the line that shows how sure you are that you could be given a text like the one shown and...

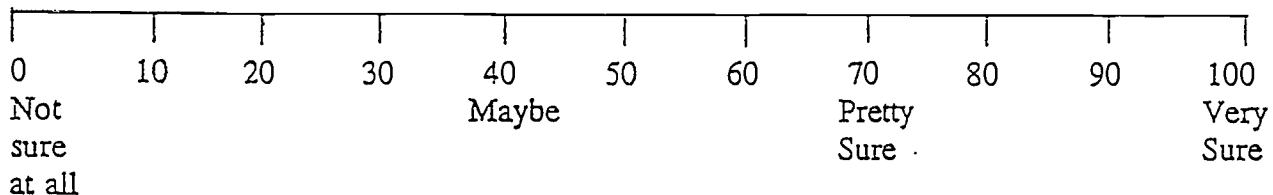
1. ...read and understand it.



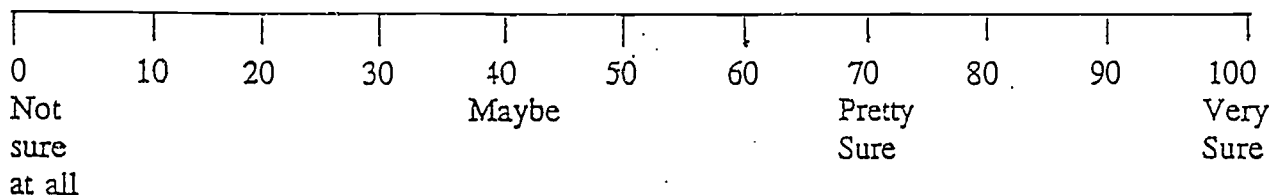
2. ...read it aloud with correct intonation.



3. ...answer questions orally about it.



4. ...answer questions in writing about it.



Task 5 - A party

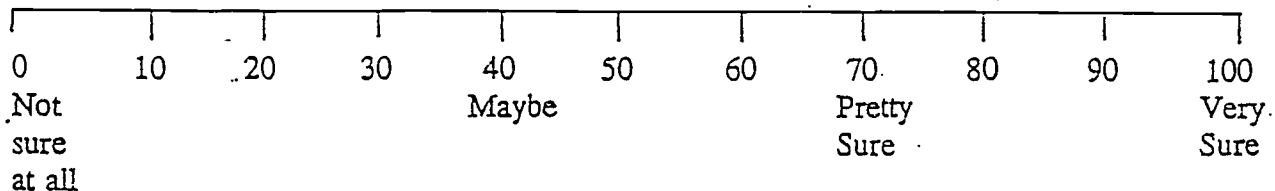


Task 5: A Situation

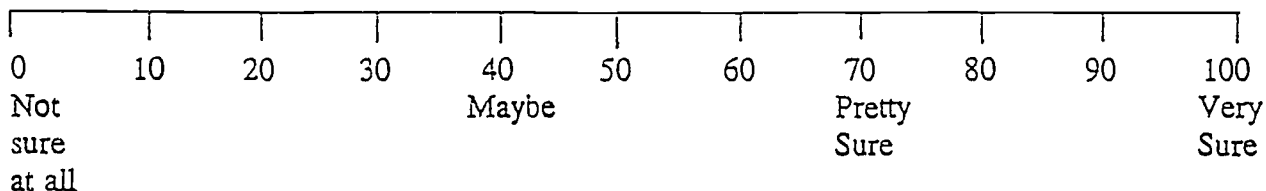
Situation: You've been invited to a party where only Japanese will be spoken.

Circle the number on the line that shows how sure you are that you could go to this party and...

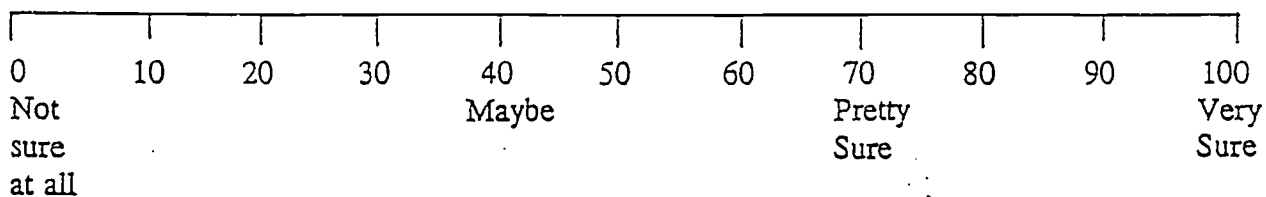
1. ...make yourself understood on topics such as: introductions, talking about what you like to do, and answering questions about yourself and your family.



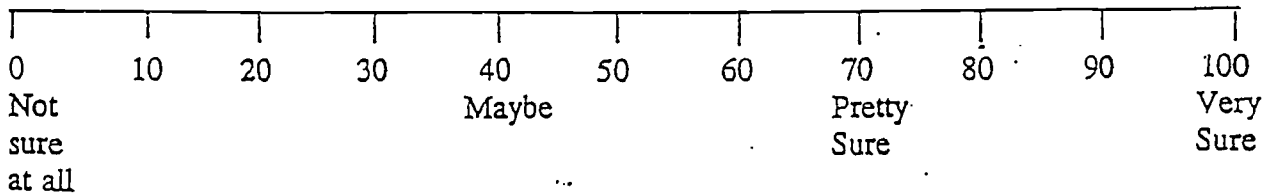
2. ...understand what others say to you in Japanese.



3. ...solve problems that arise in communication.



4. ...say and do things that are culturally correct according to Japanese culture.



Appendix A - 2.2
College Self-Efficacy Questionnaire

Name: _____ Date: _____

Rate your language learning capability:

- ♦ Before each section of this questionnaire, you will see an example of a language learning activity.
- ♦ For each activity, you are going to rate, on the scale provided, how sure you are that you could work on a task like the one shown and learn what you are supposed to in a reasonable amount of time.
- ♦ The rating scale goes from 0 to 100. The higher the number you mark, the more sure you are you could do it. The lower the number, the less sure you are you could do it.
- ♦ Please mark how you really feel about your capability to do the learning task.

Thank you for taking the time to complete this rating

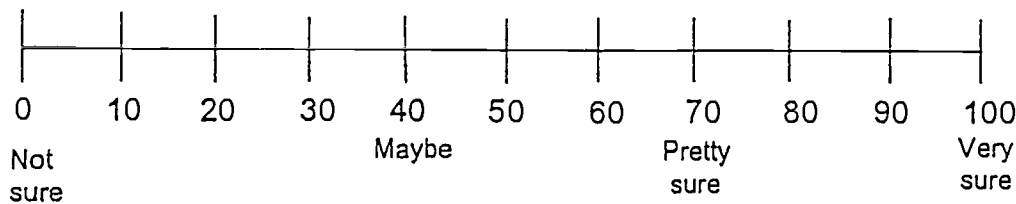
Task 1 - Vocabulary Learning (Romaji)

Take a quick look (about 5 seconds) at this vocabulary list:

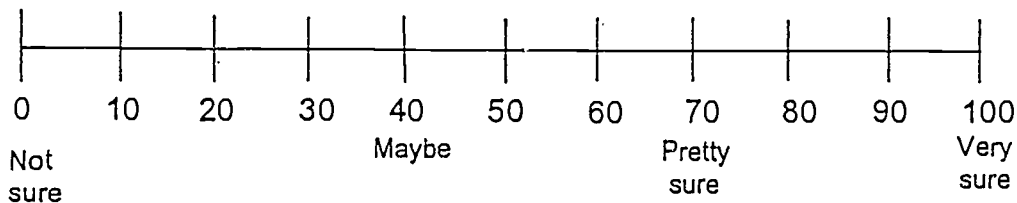
kippu	gurūn̄sya
uru /-u; utta/	hutūu(rēssya)/hutūusya
kippu o utte (i)rū no	oózēe
kippu-uriba	naraku /-u; narañda/
zyoósyañ	naraberu /-ru; narabeta/
kyuúkòokeñ	oózee narañde (i)ru tokorò
tokkyūkeñ	señēñsatu
sitēeseki	okane
ziyūuseki	(o)satu

Circle the number on the line that shows how sure you are that you could be given a list of words like those shown and...

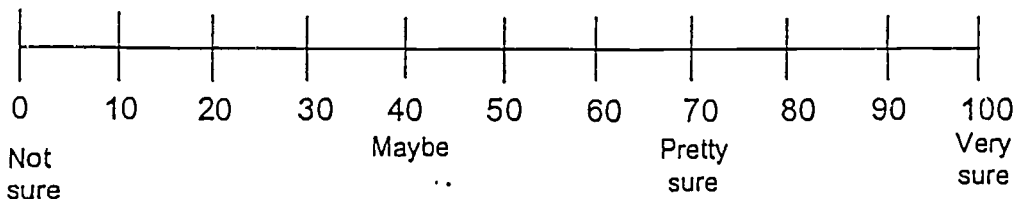
1. ...learn what each word means.



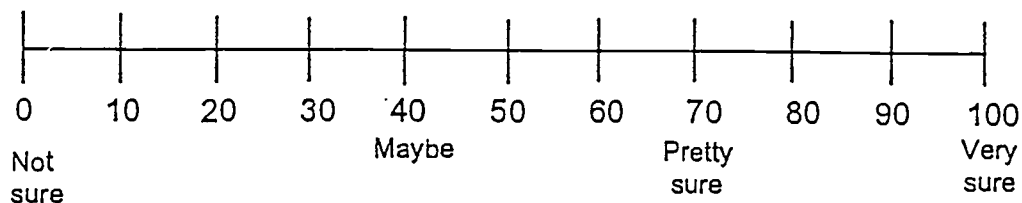
2. ...use each word correctly in a sentence.



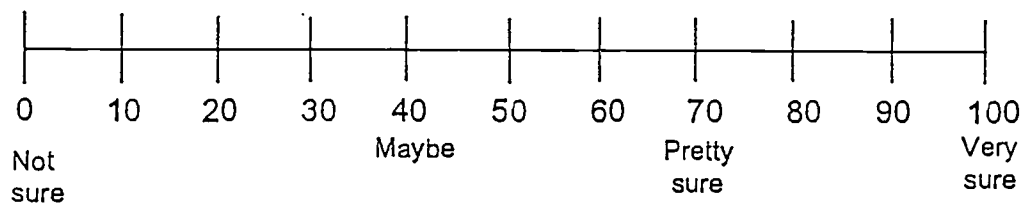
3. ...hear sentences using these words and understand what the sentences mean.



4. ... remember the meaning of each word a month later.



5. ...write sentences using these words.

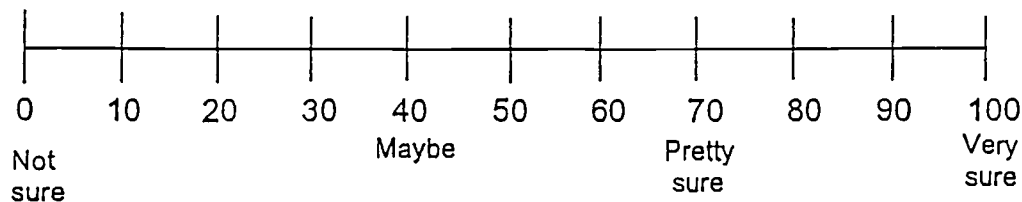


Vocabulary Learning (Kanji)

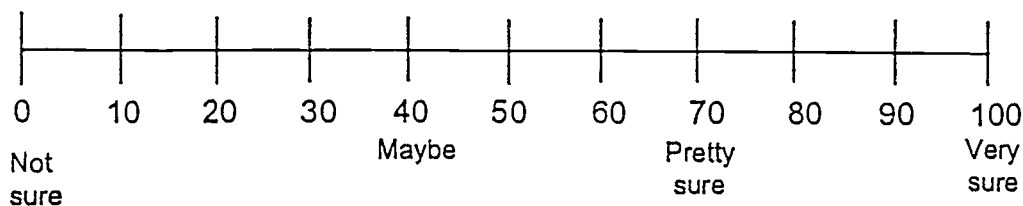
東 南 氣
西 北 馬

Circle the number on the line that shows how sure you are that you could be given a list of Kanji like those shown and...

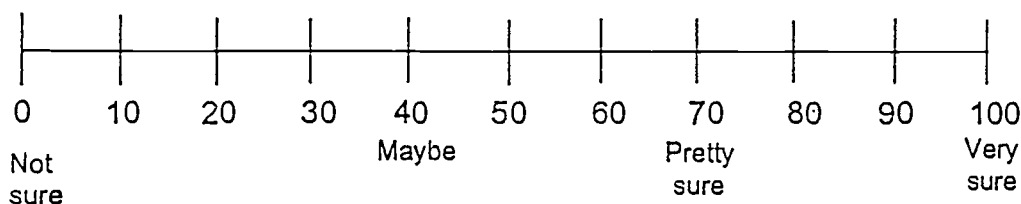
6. ...recognize each Kanji one week after it's introduced to you and remember what the character means.



7. ...read sentences that contain these Kanji and understand what the sentences mean.



8. ...learn to write each Kanji without looking at it.



Dialogue Learning (Romaji text)

5(N)a. Katyôo ga tûku no wa, itu desu ka

b. Haâkiri-sita zikan wa, wakâte (i)masu?

c. Zyâa, issyo ni mukâe ni ikimasyôo.

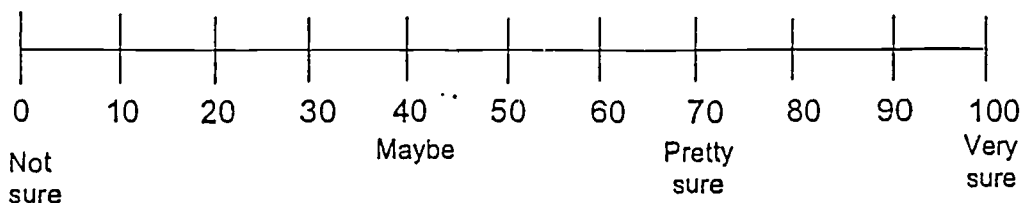
(J)a. Asâtte desu ga..

b. Êe. Siatoru kara kûru Noôsuuêsuto de ne! Zyuûrokû-zi gozyûp-puñ-tyaku desu.

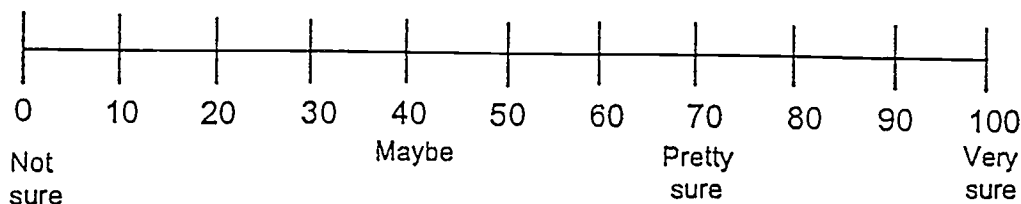
c. Kokô o dêru mae ni, moo ik-kai denwa-site, okûrete (i)nai ka dôo ka kiite mimasyôo.

Circle the number on the line that shows how sure you are that you could be given a dialogue like the one shown and...

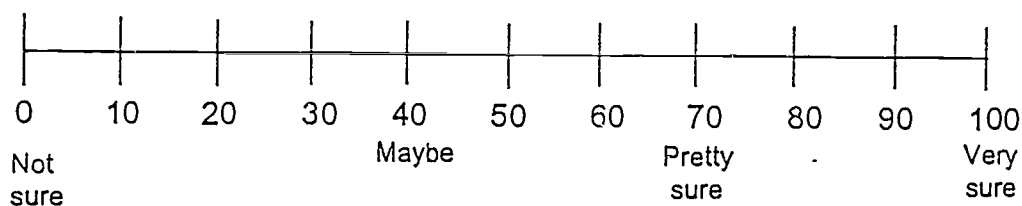
9.listen to it and understand it without referring to the text



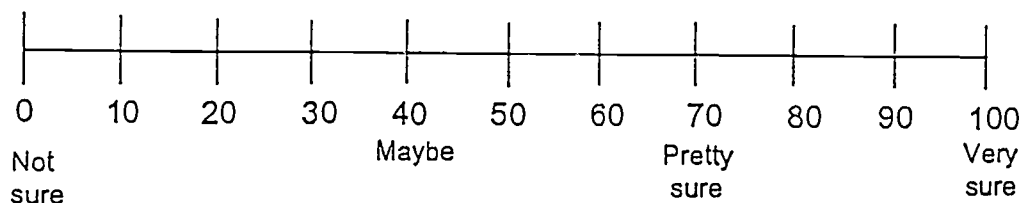
10. ...memorize it.



11. ...respond correctly in substitution drills that practice its key vocabulary and grammar.



12. ...correctly use phrases from the dialogue in other situations.



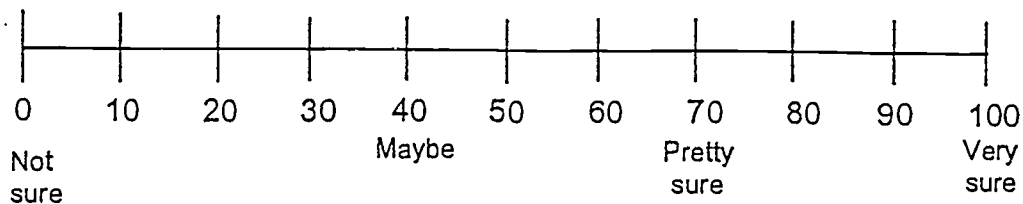
Reading Passage (Kana & Kanji)

山口さん、
お昼、もう食べましたか。もし教室の3人は電話
でピッツァを頼むんですが、山口さんもどうですか。
駅の前に新しい店ができたのですが、今週はオープ
ニング・サービスで安くなっているのです。アルバ
イトの大山君は、もうおとといもきのうもそのピ
ッツァを食べています。駅前で便利ですからね。
私はまだ食べていないので今日はピッツァにしまし
た。
今、もし教室にいますので、電話下さい。11時
半ごろには電話したいので、それまでによろしく。

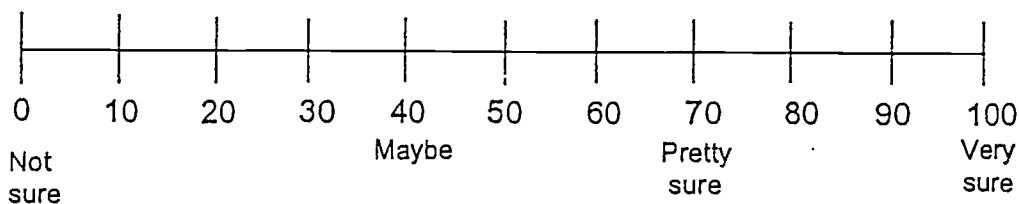
安田

Circle the number on the line that shows how sure you are that you could be given a reading passage like the one shown and...

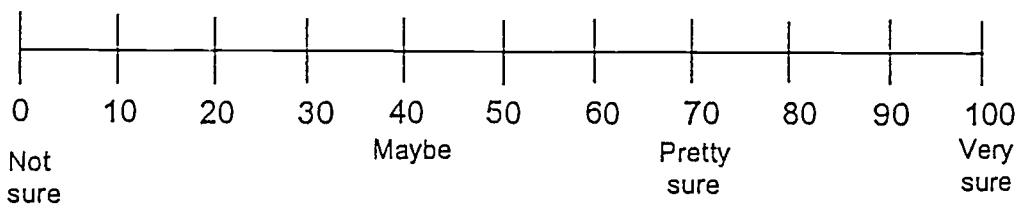
13. ...read and understand it.



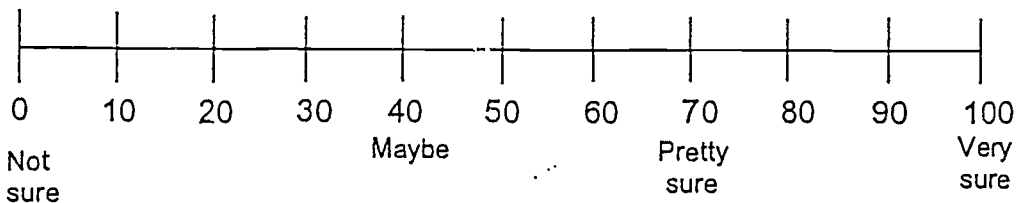
14. ...answer questions about it orally in Japanese.



15. ...answer questions in written Japanese about it.



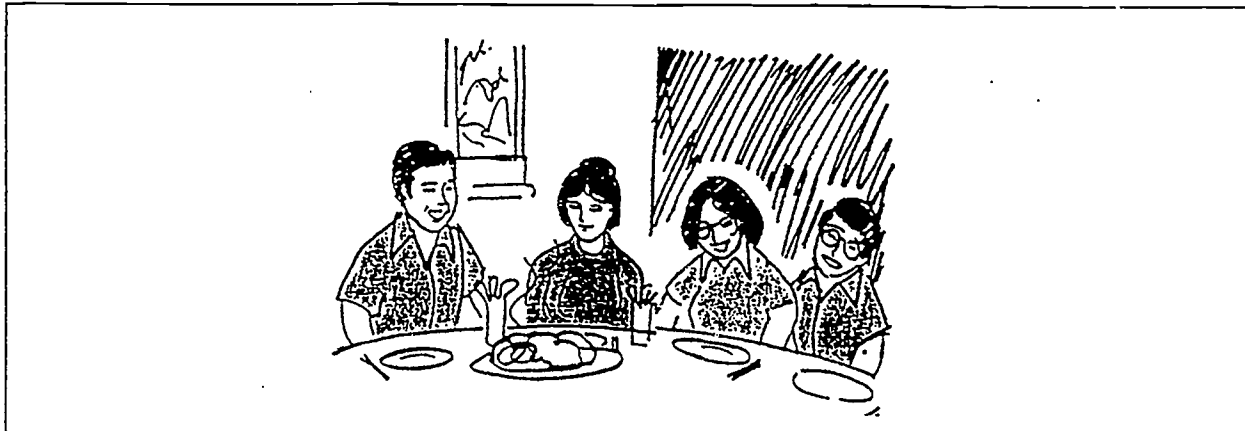
16. ...read it aloud with correct pronunciation and intonation.



...

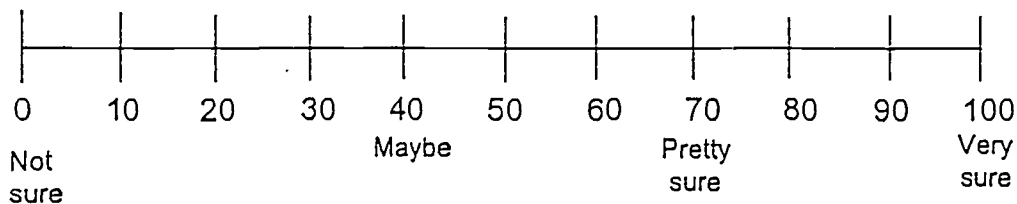
Social Situation:

You've been invited to a party where only Japanese is spoken.

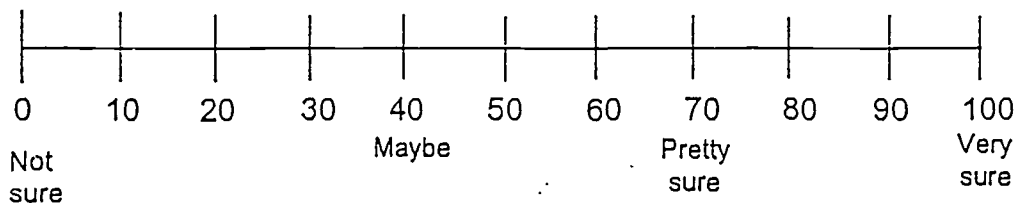


Circle the number on the line that shows how sure you are that you could go to this party and...

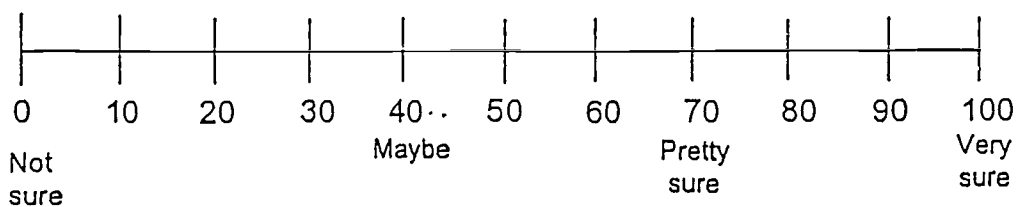
17. ...make yourself understood on topics such as: introductions, talking about what you like to do, and answering questions about yourself and your family.



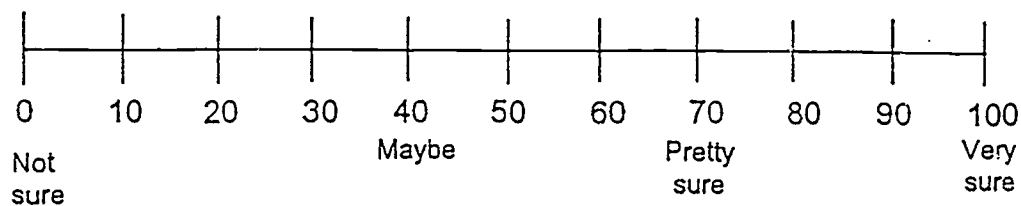
- 18.. ...understand what others say to you in Japanese.



19. ...solve problems that arise in communication.



20. ...say and do things that are culturally correct according to Japanese culture.



Thank you very much for taking the time to complete this rating scale.
Good luck in your future study of Japanese.

Appendix A - 3.1
High School Test of Language

Japanese Learning Strategy Instruction
Test of Achievement in Learning Japanese

I. Listening

> Instructions:

- ◆ You will hear ten short conversations. Before each conversation you will hear a question.
- ◆ Listen to each conversation carefully. You will hear the question again.
- ◆ Look at the choices and circle the one that best answers the question.

> Example: What time of the day is it now?

- a. Morning.
- b. Lunch time.
- c. Afternoon.
- d. Evening.

Now, begin the test:

1. How much did she pay?

- a. 110 yen
- b. 190 yen
- c. 510 yen
- d. 590 yen

2. What time is it now?

- a. 1:30
- b. 4:30
- c. 7:30
- d. 8:30

3. What is she going to do now?

- a. eat
- b. go out
- c. introduce herself
- d. sleep

4. When is the Japanese test?
- a. Monday
 - b. Tuesday
 - c. Wednesday
 - d. Thursday
5. What is the library's telephone number?
- a. 989-8024
 - b. 989-1024
 - c. 981-8024
 - d. 988-8024
6. Who is Ms. Johnson?
- a. She is an English teacher.
 - b. She is a chemistry teacher.
 - c. She is a history teacher.
 - d. She is a math teacher.
7. What are they going to do?
- a. see a movie.
 - b. go shopping together.
 - c. go to class.
 - d. go to lunch.
8. What is the weather like now?
- a. It is snowing.
 - b. It is raining.
 - c. It is sunny.
 - d. It is cloudy.
9. What is Ms. Tanaka going to do tomorrow?
- a. go shopping.
 - b. see a movie
 - c. go to the pool.
 - d. play tennis.

10. How is she going to get to New York?

- a. By bus
- b. By airplane
- c. By car
- d. By train.

II. Reading

> Instructions:

- ◆ Read the Japanese words below.
- ◆ Circle the English word that means the same thing.

1. こんにちは

- a. Good morning.
- b. Hello.
- c. Good evening.
- d. Good night.

2. じゅういちがつ

- a. January
- b. October
- c. November
- d. December

3. いただきます

- a. It was delicious.
- b. I'm leaving now.
- c. I'm starting to eat now.
- d. See you later.

4. せんせい

- a. water
- b. teacher
- c. school
- d. test

5. アイスcream

- a. ice skating
- b. sour cream
- c. mail box
- d. ice cream

6. カセットテープ

- a. scotch tape
- b. camera case
- c. cassette tape
- d. CD player

III. Read and answer questions

> Instructions:

- ◆ Read each Hiragana sentence below. There is a question about each sentence.
- ◆ Circle the option that best answer the question.

1. Where is the girl going?

おてあらいへいきます。

- a. to Japan
- b. to the airport
- c. to the bathroom
- d. to school

2. What is she going to eat?

ハンバーガーを食べます。

- a. pizza
- b. hamburger
- c. sushi
- d. sandwich

IV. Reading a passage in Hiragana.

> Instructions:

- ◆ Read the following passage written by **Sachiko** in Japanese.
- ◆ Then answer the questions in English by circling the best answer.

あしたまりちゃんとデパートにいきます。わたしは、ノートとペンをかいます。ふたりでおすしを食べます。まりちゃんは、けいちゃんのおねえさんです。とてもいいひとです。

1. Where will Mariko and Sachiko go tomorrow?

- a. to school
- b. to the library
- c. to a department store
- d. to a restaurant

2. What will Sachiko buy?

- a. a pen and a pencil
- b. a notebook and a pencil
- c. a pen and a notebook
- d. a book and a pen

3. Who is Mariko?

- a. Keiko's friend
- b. Keiko's older sister
- c. Keiko's younger sister
- d. Keiko's mother

4. What will they eat tomorrow?

- a. sashimi
- b. teriyaki
- c. tempura
- d. sushi

Appendix A - 3.2.1
College Test of Language Pretest

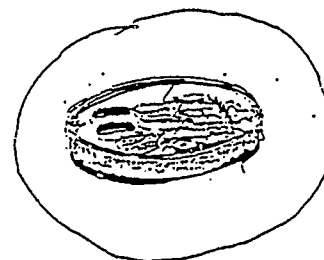
Name: _____ Date: _____

Japanese Test

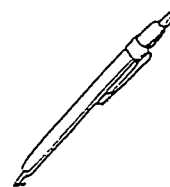
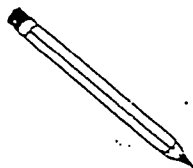
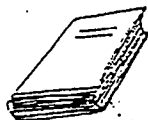
Part 1: Listening and matching to a picture

Directions: Listen to the tape. For each item, circle the picture that goes best with the word you hear.

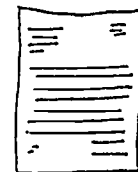
EXAMPLE:



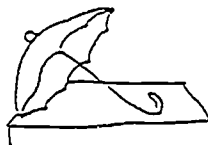
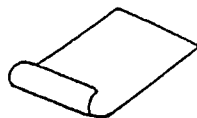
1.



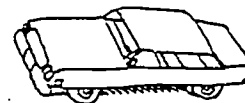
2.



3.



4.



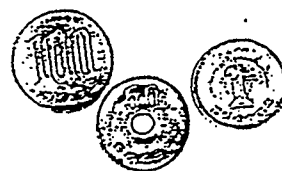
5.



にほんご



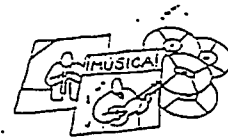
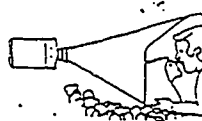
6.



7.



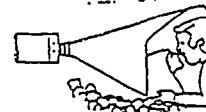
8.



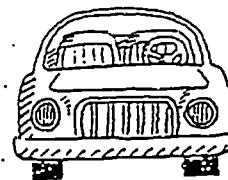
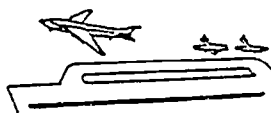
9.



English



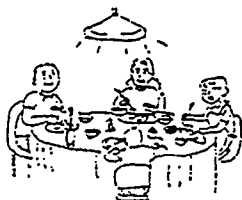
10.



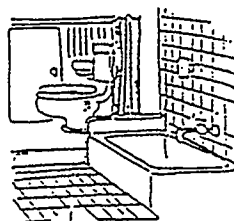
Part 2: Listening and answering questions

Directions: You are going to hear short sentences. Before each sentence, you will hear a question in English. Then you'll hear the sentence in Japanese. Then the question in English will be repeated. For each item, circle the picture or the statement (A, B, C, or D) that best answers the question.

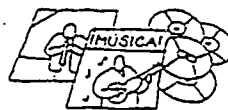
Example: What is the girl going to do?



11. Where is the girl going?



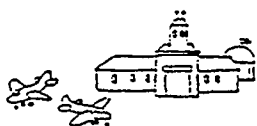
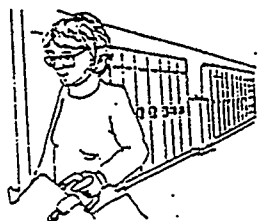
12. What is the woman going to buy?



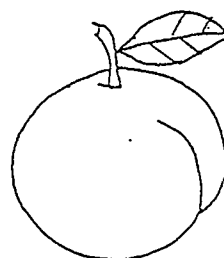
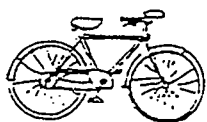
13. What is Mrs. Suzuki going to do?



14. Where is Sachiko going?



15. What does the woman see?



16. What is the girl saying?

- a. She doesn't understand.
- b. She's saying goodnight.
- c. She's welcoming someone home.
- d. She's saying *she's* home.

17. Based on what the girl says, what has probably just happened?

- a. She's just come in the door from school.
 - b. She's just finished eating.
 - c. Guests have just arrived.
 - d. Her father has just returned from work.
-

Based on what the girl says, what is *about* to happen?

- a. She's going to leave for school.
 - b. She's going to bed in a moment.
 - c. She's going to ask a favor of someone.
 - d. She's going to accept something to eat.
-

19. When is she going to buy the car?

- a. today
 - b. tomorrow
 - c. the day after tomorrow
 - d. next week
-

Part 3: Reading Japanese

Directions: Read the Japanese words below. Each item is written in Hiragana. Circle the English word that means the same thing.

1. 紙ひょう

- a. paper
- b. pen
- c. pencil
- d. book

2. せんせい

- a. water
- b. teacher
- c. school
- d. test

3. いきます

- a. to come
- b. to eat
- c. good-bye
- d. to go

4. よみます

- a. read
- b. speak
- c. listen
- d. write

5. みます

- a. drink
- b. water
- c. see
- d. paper

6. みます

- a. water
- b. airport
- c. read
- d. see

7. はなします

- a. library
- b. listen
- c. absent
- d. speak

8. おかね

- a. good night
- b. sea
- c. sea
- d. sea

9. でんわ

- a. to drink
- b. go
- c. telephone
- d. cooked rice

10. ききます

- a. to go
- b. to listen
- c. to come
- d. to see

Part 4: Read and answer questions

Directions: Read each Hiragana sentence below. There's a question about each sentence. Circle the option (A, B, C, or D) that best answers the question.

Example: Where is the girl going?

おてあらいへ いきます。

- ☒ a. to the bathroom
- b. to Japan
- c. to the airport
- d. to school

11. What is she going to do?

ほんをよみます。

- a. She's going to study.
- b. She's going to read a book.
- c. She's going to go shopping.
- d. She's going to watch a movie.

12. Where is she going?

かっこうへいきます。

- a. to school
- b. to the beach
- c. home
- d. to the library

13. What is she intending to buy?

くるまをかいます。

- a. shoes
- b. music
- c. paper
- d. car

14. What does the girl have?

しゅくだいがあります。

- a. a test
- b. a telephone
- c. homework
- d. a book

15. What did the girl buy yesterday?

ねこをかいました。

- a. paper
- b. book
- c. cat
- d. car

Thank you for your time and cooperation. You've finished this test!

Appendix A - 3.2.2
College Test of Language Posttest

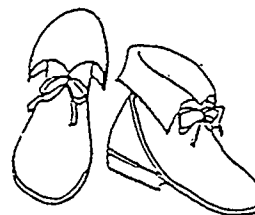
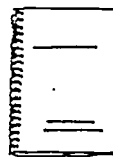
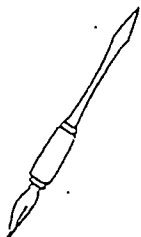
Name: _____ Date: _____

JAPANESE LISTENING POST-TEST

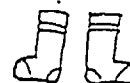
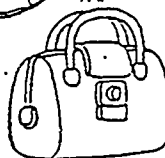
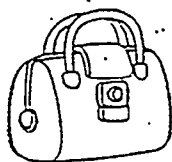
Directions:

- * You are going to hear fifteen short conversations.
- * Before you hear a conversation, you will hear a question.
- * Then you'll hear the conversation.
- * Then you'll hear the question again.
- * Listen carefully to the question and the conversation, with the special purpose of determining the answer to that question.
- * Circle the picture or sentence below that answers the question.

EXAMPLE: What did she buy?



1. What did she buy?



2. How much did the dictionary cost?

- A. 1300 yen
- B. 1500 yen
- C. 2000 yen
- D. 2300 yen

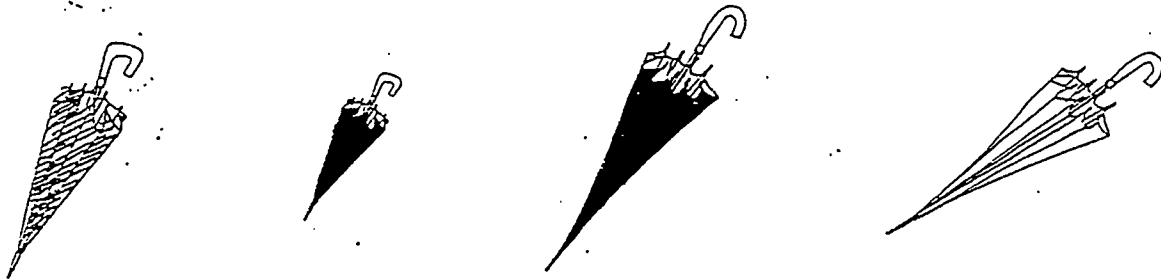
3. What is she going to buy for him?

- A. A book
- B. A pack of cigarettes
- C. A magazine
- D. Chewing gum

4. What time is it now?

- A. 3:10
- B. 4:00
- C. 4:10
- D. 4:30

5. What did she buy?



6. How many children does she have?

- A. one
 - B. two
 - C. three
 - D. four
-

7. How old is the baby?

- A. one month
- B. seven months
- C. eight months
- D. twelve months

8. Who is Ms. Ono introducing to the professor?

- A. her younger brother
- B. her younger sister
- C. her older brother
- D. her older sister

9. Why can't Mr. Kimura see Mr. Suzuki immediately?

- A. Mr. Kimura came on the wrong day.
- B. Mr. Kimura came without an appointment.
- C. Mr. Kimura came too early.
- D. Mr. Suzuki didn't come to work today.

10. Who is more proficient in English?

- A. Mr. Tanaka
- B. Mr. Suzuki
- C. Mr. Nakada
- D. The two are equally proficient.

11. What's Mr. Smith's home phone number?

- A. (045) 326-8871
 - B. (045) 326-8861
 - C. (045) 327-8781
 - D. (045) 327-8871
-

12. Where does Ms. Kodama work?

- A. Ministry of Finance
- B. Ministry of Foreign Affairs
- C. Ministry of Education
- D. Continental Bank

13. Where is Mr. Kodama going first?

- A. Home
- B. To the library.
- C. To the embassy.
- D. To the post office.

14. What is she going to have?

- A. Sushi and beer
- B. Sushi and tea
- C. Tempura and beer
- D. Tempura and tea

15. What is Carol's message?

- A. She's stopping by at 11:00.
- B. She'll be in the office until 11:00.
- C. She's going out of town tomorrow.
- D. She won't be in the office today.

16. With whom is Ms. Tanaka going on vacation?

- A. her husband, daughter, and older sister
 - B. Mr. Smith, Mrs. Smith, and her older brother
 - C. her own brother and sister
 - D. Mr. Smith and Mr. Smith's older brother and sister
-

Appendix A - 4
Observation Summary

Classroom Observation Summary

Language:	<input type="checkbox"/> H.S. <input type="checkbox"/> College	<input type="checkbox"/> A (Explicit) <input type="checkbox"/> B (Descriptive)	<input type="checkbox"/> Honors <input type="checkbox"/> Regular	Teacher:
Observer:	Date:	Time began:	Time ended:	Total time:

Please note how the teacher implements the instruction for each strategy.

I. DIRECT EXPLANATION

Strategies taught:	S_1	S_2	S_3
Explicitly defines strategy			
Explicitly reviews strategy			
Models strategy use <ul style="list-style-type: none"> • tells how to use • models think-aloud process 			
Gives metacognitive information <ul style="list-style-type: none"> • when, where, why to use • gives example of what good learners do • shares personal experience with strategy use 			

Classroom Observation Summary

II. PRACTICE / SCAFFOLDING

Strategies taught:	S ₁	S ₂	S ₃
Provides opportunity to practice strategy			
Reinforces strategy use <ul style="list-style-type: none"> • points out students' use of strategy • elicits or clarifies students' explanation of thought processes 			
Uses teacher / student prompts			
Leads students in evaluating the value of strategy			

III. TASKS REQUIRED OF STUDENTS

Briefly describe the task the strategy was applied to.			
Vocabulary Development			
Grammar Drill			
Listening Comprehension			
Reading Comprehension			
Speaking / Listening			
Writing			

Classroom Observation Summary

IV. GENERAL QUESTIONS

Does the teacher provide a realistic context?

Does the teacher emphasize any strategy other than the ones in our model?

Is there any evidence of students' unprompted use of strategies?

State teacher's comments on strategy instruction.

State students' comments on strategy instruction.

Give your general impression of the percentage of class time spent on strategy instruction.

Other comments

Classroom Observation Summary

IV. GENERAL QUESTIONS

Does the teacher provide a realistic context?

Does the teacher emphasize any strategy other than the ones in our model?

Is there any evidence of students' unprompted use of strategies?

State teacher's comments on strategy instruction.

State students' comments on strategy instruction.

Give your general impression of the percentage of class time spent on strategy instruction.

Other comments

Appendix A - 5
Background Questionnaire

Name: _____ Date: _____

Background Questionnaire

Age: _____		Circle gender: M F			
Year :	Freshman	Sophomore	Junior	Senior	
Major: _____		Minor: _____			
SAT score: _____		TOEFL score: _____		Native Language: _____	
Have you studied Japanese before? <div style="text-align: right;">Y N</div>		Where did you study Japanese? _____		How long did you study it? _____	
Have you ever visited Japan? <div style="text-align: right;">Y N</div>		If you visited Japan, when were you there? _____		How long were you there? _____	
Do any of your relatives speak Japanese? <div style="text-align: right;">Y N</div>		Are/Were languages other than English spoken in your home? <div style="text-align: right;">Y N</div>		Do you use another language at home? <div style="text-align: right;">Y N</div>	
List other languages you know or are studying and indicate how well you can listen to, speak, read, or write this language.					
First foreign language: _____		(Circle the number that shows your ability)			
		Minimal			Fluent
listen	1	2	3	4	5
speak	1	2	3	4	5
read	1	2	3	4	5
write	1	2	3	4	5
Second foreign language: _____		(Circle the number that shows your ability)			
		Minimal			Fluent
listen	1	2	3	4	5
speak	1	2	3	4	5
read	1	2	3	4	5
write	1	2	3	4	5
What do you expect to gain by learning Japanese?					

Appendix A - 6
Teacher Interview Guide

Teacher Interview/Questionnaire

I. Strategies Instruction in your classroom

1. To what degree has strategy instruction helped you to accomplish your instructional goals?

2. In what ways, if any, has it kept you from attaining your goals?

3. How do you feel about working with scripted learning strategy lessons?

4. How do you feel about developing your own learning strategy lessons?

5. Which strategies do you feel are particularly effective for your students?

6. What is difficult about teaching strategies?
7. How applicable is strategy instruction for teaching the four language skills: reading, writing listening, speaking.
8. How has the teaching of strategies affected the use of the target language by you and by the students in class?
9. What are your students' attitudes towards strategies instruction?
10. How effectively did students previously not exposed to strategies come up to speed?

II. Professional Development

1. What kind of professional support would you find most helpful (initially and continuing)?
2. Is there anything you would change in the manner of professional development feedback you received?
3. How beneficial would it be (or has it been) to work with another teacher at your school who was doing the same thing?
4. How confident are you in your understanding of learning strategies?
5. How competent do you perceive yourself as a teacher of learning strategies?
6. How comfortable do you feel in assisting in professional development?

Appendix A - 7
Teacher Ranking Scale

CRITERIA FOR GOOD LANGUAGE LEARNERS

Scale 1 = High 2 = Average 3 = Low

- I. Performance
 - Grades
 - test scores
 - homework assignments
 - proficiency

- II. Ability
 - Aptitude for language learning
 - good memory
 - good "ear" for language
 - highly verbal
 - strategic approach to learning.

- III. Effort
 - attention in class
 - completion or quality of homework
 - class participation
 - motivation, presence of initiative
 - attempts made to use target language in the "real world"
 - actual class attendance

Comments: Note here if there are any mitigating circumstances such as health or family problems that you may be aware of which could possibly affect the student in any of the above capacities.

Appendix A - 8.1
Midyear Questionnaire (1992)

LEARNING STRATEGIES REVIEW QUESTIONNAIRE

1/92

Name: _____ Date: _____

This class has been practicing the use of learning strategies in studying Japanese as part of a research program conducted by Georgetown University. These learning strategies, or special techniques you can use to improve your learning, have been introduced and described by your teacher.

We now wish to get your impressions of some of the learning strategies introduced so far. This questionnaire asks you to indicate strategies that you have found to be effective in learning Japanese, strategies that were not effective, and to indicate why. Please give your honest reaction so that we can improve these strategies and their usefulness to you in the future.

Read each strategy name and definition, then answer the questions.

1. **Directed Attention:** Deciding in advance to pay attention to a learning activity and to ignore distractions.

- a. Do you use this strategy in class? YES _____ NO _____
b. Do you use this strategy at home? YES _____ NO _____
c. If you answered YES to a or b, with what kind of materials do you use this strategy?

1.) Vocabulary _____ 3.) Listening _____ 5.) Reading _____
2.) Grammar _____ 4.) Speaking _____ 6.) Writing _____

- d. Why do you use this strategy or why not? _____

2. **Selective Attention:** Deciding to pay attention to specific aspects of a listening or reading activity, such as key words or special topics.

- a. Do you use this strategy in class? YES _____ NO _____
b. Do you use this strategy at home? YES _____ NO _____
c. If you answered YES to a or b, with what kind of materials do you use this strategy?

1.) Vocabulary _____ 3.) Listening _____ 5.) Reading _____
2.) Grammar _____ 4.) Speaking _____ 6.) Writing _____

- d. Why do you use this strategy or why not? _____

3. **Grouping:** Grouping vocabulary words that go together in some way to make them easier to remember; remembering words or other information based on previous groupings.

- a. Do you use this strategy in class? YES____ NO____
b. Do you use this strategy at home? YES____ NO____
c. If you answered YES to a or b, with what kind of materials do you use this strategy?

1.) Vocabulary____ 3.) Listening____ 5.) Reading____
2.) Grammar ____ 4.) Speaking ____ 6.) Writing____

d. Why do you use this strategy or why not? _____

4. **Contextualization:** Linking new information to what you already know or to personal experiences; linking new vocabulary to real objects; making a picture in your mind of the new vocabulary or information.

- a. Do you use this strategy in class? YES____ NO____
b. Do you use this strategy at home? YES____ NO____
c. If you answered YES to a or b, with what kind of materials do you use this strategy?

1.) Vocabulary____ 3.) Listening____ 5.) Reading____
2.) Grammar ____ 4.) Speaking ____ 6.) Writing____

d. Why do you use this strategy or why not? _____

5. **Creative Repetition:** Trying different ways of repeating new materials, such as using words in sentences, saying them aloud, acting them out as you say them, or using them in a conversation.

- a. Do you use this strategy in class? YES____ NO____
b. Do you use this strategy at home? YES____ NO____
c. If you answered YES to a or b, with what kind of materials do you use this strategy?

1.) Vocabulary____ 3.) Listening____ 5.) Reading____
2.) Grammar ____ 4.) Speaking ____ 6.) Writing____

d. Why do you use this strategy or why not? _____

6. What other strategies do you use? _____

Appendix A - 8.2
Midyear Questionnaire (1993)

Name: _____ Date: _____

Mid-year Evaluation - Reading & General

You have already answered questions about your speaking and listening skills for Japanese. This questionnaire is designed to find out what aspects of reading and learning Japanese in general have caused difficulty for you.

- ♦ By identifying the problems you have, you will be able to seek out the solutions to them, and become a more successful language learner.
- ♦ Our work in the coming semester will focus on strategies that might be the most helpful to you as an individual learner.

Please circle the choice that tells how much each statement applies to you. If you have tried **any techniques** in the past to deal with the problem please write them in the blanks following the statement.

III. Reading

1. I have to write Romaji above sentences that are written in Japanese characters.

Never Rarely Sometimes Usually Always

2. I can not separate words from each other when I'm reading.

Never Rarely Sometimes Usually Always

3. It takes so long for me to decode the sentence that I can't get the general idea.

Never Rarely Sometimes Usually Always

Name: _____ Date: _____

4. Are there any other problems related to reading that you have encountered in the last semester? Do you have any solutions for those problems?

IV. General

1. I can't see the connection between the lesson objectives and the activities that I am engaged in.

Never Rarely Sometimes Usually Always

2. I feel unprepared when I am called on for a drill.

Never Rarely Sometimes Usually Always

3. It's hard for me to study with my class mates or my Japanese friends outside of class.

Never Rarely Sometimes Usually Always

4. Are there other general problems that you have encountered in the last semester? Do you have any solutions for those problems?

Name: _____ Date: _____

Mid-year Evaluation - Speaking & Listening

Most of you have studied Japanese for a semester at Georgetown University. This questionnaire is designed to find out what aspects of speaking and listening to Japanese have caused difficulty for you.

- ♦ By identifying the problems you have, you will be able to seek out the solutions to them, and become a more successful language learner.
- ♦ Our work in the coming semester will focus on strategies that might be the most helpful to you as an individual learner.

Please circle the choice that tells how much each statement applies to you. If you have tried **any techniques** in the past to deal with the problem please write them in the blanks following the statement.

1. Speaking

1. I forget the words in Japanese when I speak.

Never Rarely Sometimes Usually Always

2. I try to translate English into Japanese.

Never Rarely Sometimes Usually Always

3. I feel my Japanese has a heavy accent, so teachers or friends don't understand me.

Never Rarely Sometimes Usually Always

Name: _____ Date: _____

4. I feel very nervous when I speak Japanese, so I can't enjoy it.

Never Rarely Sometimes Usually Always

5. I don't know how I can use Japanese expressions appropriately in real life situations.

Never Rarely Sometimes Usually Always

6. Are there any other problems related to speaking that you have encountered in the last semester? Do you have any solutions for those problems?

II. *Listening*

1. I don't understand what the teacher says in class.

Never Rarely Sometimes Usually Always

2. I don't understand what the other students say in class.

Never Rarely Sometimes Usually Always

Name: _____ Date: _____

3. Even though I can recognize the sound of the words when I am listening to native speakers, I don't understand what they mean.

Never Rarely Sometimes Usually Always

4. Are there other problems related to listening that you have encountered in the last semester? Do you have any solutions for those problems?

Appendix B
Learning Strategies Instruction

Appendix B - 1
Sample Learning Strategies Lesson for High School

Homework Worksheet 5b

な か ま わ け

Learn Japanese hiragana by **Grouping** them into similar ones, difficult versus similar ones, ones that rhyme. This sheet asks you to think about how you deal with the Hiragana *that cause you trouble*. Remember the more ways you repeat and regroup, the better you remember!

Write 5 pairs of Hiragana that you think are *similar* to each other.

1. _____
2. _____
3. _____
4. _____
5. _____

Now think about their *differences*. To yourself, state *in one sentence* what makes one different from the other. Now write a sentence that will help you remember what sound each one stands for.

Example: When I see け, I tell myself, "You (Yu) *can* write this hard character."

- 1.
- 2.
- 3.
- 4.
- 5.

Day 4 Week 6

Material: Hiragana Lesson
Props: Overhead Transparency of Hiragana Memory Helpers
Worksheets: Discussion of Homework Worksheet 6B

Description of Activities

Teacher Notes

1. Ask students: *"On the Homework Worksheet 6B, what were some of the Hiragana you thought would be difficult to remember? How did you decide to try to remember them?"*

This allows students to share their own learning strategies and learn from each other.

2. If students don't have any suggestions, give examples of your own, such as

ぬ (nu) is confused with め (me)
so remember いぬ (inu) "dog"

ね (ne) is confused with わ (wa)
so remember ねこ (neko) "cat"

"The trick is to remember that both ぬ and ね have a tail. Compare ぬ (nu) with め (me) and ね (ne) with わ (wa) which don't have the little loop at the bottom, or tail."

SUMMARY OF HIRAGANA STRATEGIES

The class recently completed worksheets on their strategies for remembering hiragana. A look at them showed that there were basically two different approaches.

1. Some students relied on the visual differences between characters, as in:

(は ha v. ほ ho)

There are two bars on ほ(ho).

There is a horizontal line on ほ(ho)

(わ wa v. れ re)

わ (wa) curves inward and れ (re) out

わ (wa) looks like a person riding a horse.

(さ sa v. き ki)

The key to remembering き (ki) is the two bars.

(ち chi v. ら ra)

The dash goes across one and it doesn't touch the other.

(お' o v. あ a)

There is a little dash on the side of お'(o).

2. Other students relied on the sound of the characters, and wrote sentences with them:

ほ!(ho) ほ!(ho) It's Christmas Eve!

し (shi) is a girl.

は!(ha) this character is funny looking (or easy.)

ね (ne) Nay, it's not an easy character.

ぬ (nu) That's new!

し (shi)'s really a ひ (hi).

Appendix B - 2
Sample Learning Strategies Lessons for College

The following lesson are related to the textbook: *Japanese: The Spoken Language* by Eleanor Harz Jorden with Mari Noda

Material: Lesson 12 A Application & Utilization
Worksheets: Student Worksheet 21 (A and B versions) - Denwa Bangoo - Ansyoo
Objectives: To practice Ansyoo (Silent Repetition) with telephone numbers.

Description of Activities

1. For application A, p. 329, hand out the worksheet, being careful to give alternating students the "A" and "B" versions. Have students sit back to back, and ask their partners for the telephone numbers they lack on their own sheets. Tell them:

"When you are given the phone number, don't write it down as you hear it. After listening to the phone number, use Ansyoo - play back the number in your mind, immediately after you hear it. Then write it down. In a real-life situation, you will be able to use this skill, Ansyoo, for the times when someone says a number too quickly for you to write it down - or when you hear a number on the radio, for example, and can't ask for a repetition."

Name: _____ Date: _____

Student Worksheet 21 A - Denwa Bangoo no Ansyoo

Instructions:

- * Sit with your back to your partner.
- * In Japanese, ask your partner for these telephone numbers.
- * When your partner says the number, don't write it down as s/he says it. Wait a few seconds and **try to hear it echo in your mind**. As you may remember, this is the strategy called **Ansyoo**, or Silent Repetition; playing back a sound immediately after hearing it.
- * After you have heard the number a second time, as it echoes in your mind, **write it down**.

This technique may seem like an extra step for you now, but in the future there will be times when you won't be able to ask for a repetition - hearing a number on the radio, or getting a recording on the telephone. If you practice this now you'll develop a skill that will help you in such situations.

Ask the number of: (Use Ansyoo!)

Tell the number of:

Riggs Bank

Vital Vittles 944-2296

G.U. Bookstore

Parking Office 688-4355

Tower Records

Domino's Pizza 342-0100

Financial Aid

Japanese Dept. 688-5918

Name: _____ Date: _____

Student Worksheet 21 B - Denwa Bangoo no Ansyoo

Instructions:

- * Sit with your back to your partner.
- * In Japanese, ask your partner for these telephone numbers.
- * When your partner says the number, don't write it down as s/he says it. Wait a few seconds and **try to hear it echo in your mind**. As you may remember, this is the strategy called **Ansyoo**, or Silent Repetition; playing back a sound immediately after hearing it.
- * After you have heard the number a second time, as it echoes in your mind, **write it down**.

This technique may seem like an extra step for you now, but in the future there will be times when you won't be able to ask for a repetition - hearing a number on the radio, or getting a recording on the telephone. If you practice this now you'll develop a skill that will help you in such situations.

Ask the number of: (Use Ansyoo!)

Tell the number of:

Vital Vittles

Riggs Bank 835-7378

Parking Office

G.U. Bookstore 688-7482

Domino's Pizza

Tower Records 331-2400

Japanese Dept.

Financial Aid 688-4547

Material: Lesson 12 B CC 1, Drills A, G, H
Worksheets: Student Worksheet 21C - Yoki (Prediction) and Pointosyuutyuu (Selective Attention)
Objectives: To get more practice using **Yoki** (Prediction) and **Pointosyuutyuu** (Selective Attention) with the Core Conversations.

Description of Activities

1. Before viewing Core Conversation 1 on the tape, have students think about the conversations and make predictions on the worksheet. First ask what style they expect that the caller will use: polite or casual style. Then ask them to think about what usually takes place during phone conversations. For example, the person who answers the phone usually identifies the location called, the person called is either there or not there, and if that person is not there, the caller either calls back or asks for a return call. Based on this background knowledge, students can assume the three questions on the worksheet might be answered by the conversation. Have them **predict** what words they will hear that will answer those questions: for the first question, the name will have 'daigaku' (university) attached to it. For the second question, the professor will have the title 'sensei' after his name. Tell students:

Now that you have made predictions about the words you might hear in answer to these questions, listen selectively for those words when I play the tape. When you hear one of those words, you know the answer will be adjacent to it.

Name: _____ Date: _____

Student Worksheet 21 C - Yoki & Pointosyuutyuu

Instructions: Before listening to the tape of CC 2 & 3, think about the conversation you are going to hear. In #2, a woman is calling a professor at a university. What type of speech do you expect to hear? _____

I. Jot down any words you think you might hear in answer to these questions:

1. What university did she call?
2. Whom does she want to talk to?
3. Is the person called in?

II. Now listen to the tape. Answer the questions if you can. If not, listen again.

1. What university did she call?
2. Whom does she want to talk to?
3. Is the person called in?

III. Have you used this technique, Yoki (predicting) at home when you listen to the audio tapes? Does it help you? If you haven't used it on your own yet, give it a try, and see if it works for you.

Appendix C

Student Comments on Strategies Use

Metacognitive Strategies

Directed Attention

- Listen carefully
- Divorce myself from distractions
- Give your undivided attention when listening to a foreign language

Selective Attention

- Look for key words and phrases
- Remember the key as facts of characters (strokes)
- Ignore unknown words-Listen to what I know
- Look at the sentence structure
- Listen for the main idea
- Read for comprehension of detail & imagery
- Listen for the correct way of pronouncing the new vocabulary
- Pick out the words I do understand and try to make an educated guess about what was said

Prediction

- Think of the topic/- phrases in book
- Review and look ahead in the book so you have an idea of what will be said
- Think up many vocabulary words that might fit the situation of the core conversation

Self-Management

- Say only what I know and get help on what I don't know

- Speak on tape and listen to myself
- Speak slowly
- Work on pronunciation
- (I use prediction) so I can be calm when the question is asked
- Say them in my head and see if I say it right

Cognitive Strategies

Silent Repetition

- Let what is said echo in my mind

Kinesthetic or Auditory Repetition

- Air-brush characters (with my finger in the air)
- Write it down to get a better feel of it
- Write it again and again
- Read aloud while thinking about inflection of how the word is said
- Say while writing

Associations

- Remember sight & sound associations
- Use flashcards with pictures of them
- Look for any similarities between the Hiragana and Kanji spellings
- Think of an English word that sounds like the Japanese word
- Relate to what I already know about Japanese

Personalization

- Associate with things in my life
- Associate the characters with something familiar

Creative Repetition

- Teach to others
- Create stories or dialogues with new vocabulary

Contextualization

- Use the context of the sentences in the core conversations to help me remember new vocabulary
- Connect the new vocabulary to real objects / picture the object in my mind as I look at the word
- Act it out using my hands as puppets
- Try to imagine a situation where you would use the word or phrase
- Use in everyday conversation
- Create a response to what I'm hearing

Imagery

- Relate the calligraphy to a picture of something
- Imagine myself as a participant
- Visualize social situation or objects
- Draw a picture to represent the meaning
- I listen very carefully and hear all these pictures of what's being said
- Remember and visualize the video
- Visualize myself speaking to a Japanese speaker

Resourcing

- Use the class tapes and books
- Look for Japanese books in the library

Grouping

- Break down the vocabulary to certain situations

- Remember an opposite or similar word
- Group words together based on forms (I.E.: V, ADJ, N)
- Group vocabulary for certain ideas (family names, travel words, colors, etc.)
- Separate flashcards

Note-taking

- Write down words I have difficulty pronouncing

Deduction/Induction

- Read the grammar so that I understand how and why I use the new vocabulary the way that I do transfer
- I think of what English words it reminds me of
- Japanese characters are almost the same as Chinese
- I'm Chinese so it helps to understand a little bit about a foreign language
- Use phonetic spelling
- Don't use phonetic spelling

Inferencing

- Watch the other speaker's body language and facial expressions
- When I don't know what everything means I listen to certain things and reason it out
- Recall what the teacher said just before and see what little clues I can find

Social & Affective Strategies

Questioning

- Ask the teacher
- Ask peers - they speak slowly and have the same amount of vocabulary as you

Cooperation

- Practice through in-class group work
- Study with a classmate

- Practice with others
- Play games in Japanese
- Create opportunities by motivating friends to use Japanese
- Have friends quiz me
- Since tapes are too fast, I work with my Japanese partner and have her repeat slowly every sentence
- Use words I've already learned with friends and family members